APPENDIX A

Notice of Preparation of a Draft Environmental Impact Report and Notice of Public Scoping Meeting, Initial Study, and Scoping Comments

NOTICE OF PREPARATION OF A

DRAFT ENVIRONMENTAL IMPACT REPORT

AND

NOTICE OF PUBLIC SCOPING MEETING

To:	All Interested Agencies, Organizations and Persons
From:	The County of Los Angeles
Subject:	Notice of Preparation of a Draft Environmental Impact Report and Public Scoping Meeting
Project Title:	Carol Kimmelman Sports and Academic Campus
Project Proponent:	The Carol Kimmelman Center, LLC
Project Address:	340 Martin Luther King, Jr. Street
Date of Notice:	July 31, 2018

The County of Los Angeles (County) will be the Lead Agency and will require the preparation of an Environmental Impact Report (EIR) for the Carol Kimmelman Sports and Academic Campus (the Project) proposed by The Carol Kimmelman Center, LLC, a Delaware nonprofit limited liability company. The County requests agencies' timely comments as to the scope and content of the EIR related to the agencies' responsibilities. For all interested agencies, organizations and persons, this scoping notice allows you an early opportunity to consult on the Project before preparation of the Draft EIR. Following preparation of the Draft EIR, there will be a later separate notice of the future opportunity to comment on the analyses of the Project in the Draft EIR.

The Project description, the potential environmental effects anticipated to be studied in the EIR, and the environmental factors not potentially affected that would not be addressed in the EIR are set forth in the Initial Study and summarized here. Also included below are the date, time, and location of the Scoping Meeting that will be held in order to solicit input regarding the content of the Draft EIR. The Scoping Meeting will be in an open house format. No decisions about the Project will be made at the scoping meeting. A copy of the Initial Study prepared for the Project is not attached due to its length, but is available for public review online at https://bit.ly/2LsS3Uu, or at https://kimmelmancenter.org, and in hard copy by appointment at Los Angeles County Department of Public Works, Project Management Division II, 900 South Fremont Avenue, 5th Floor, Alhambra, CA 91803. Appointment requests should be made to Ryan Kristan at rkristan@dpw.lacounty.gov or at (626) 300-3271.

PROJECT BACKGROUND AND SUMMARY DESCRIPTION: The proposed Project involves the development of the Carol Kimmelman Sports and Academic Campus on a site located at 340 Martin Luther King Jr. Street in the City of Carson, California consisting of approximately 87 acres in the northeastern portion of the existing Victoria Golf Course and adjacent tennis courts (the Project Site). The Project Site is located northeast of the Dominguez Channel and east of the junction of the 405 and 110 Freeways. The Project Site is bounded by Martin Luther King Jr. Street to the north, Avalon Boulevard to the east, and the balance of the Victoria Golf Course property to the south and west.

The proposed Project includes a tennis center and soccer center for underserved youth as well as programs for adults. The tennis center component would include a welcome center, tennis courts for all ages and skill levels, and training facilities. Also located in the tennis center component would be a learning center that would provide academic counseling, mentorship, and enrichment services. The soccer center component would include soccer fields, multi-purpose fields and support buildings. The Project Site would be developed with up to approximately 75,000 square feet of buildings, with possible expansion space for an additional 22,000 square feet of buildings. Up to an additional 5,000 square feet of miscellaneous support buildings, including maintenance facilities, restrooms, and sheds, would be constructed throughout the Project.

The approximately 29-acre tennis center would include approximately: a 23,000-square-foot welcome center, 50 tennis courts of various sizes, a 5,000-square-foot administration building, a spectator venue with up to 12 hard courts and a total of 1200 seats, a 13,000-square-foot player development building, and outdoor training spaces including a 100-meter sprint track, two basketball courts, and a training turf, a maintenance facility, and vehicle and bus parking.

Adjacent to the tennis center would be an approximately 25,000-square-foot learning center. The learning center would include classrooms, quiet rooms, and staff support for homework, counseling and tutoring. The welcome center and learning center would be in the main entrance area within the northwest portion of the Project Site.

The approximately 58-acre soccer center would provide up to two full-sized artificial turf soccer fields, two natural grass multipurpose fields, six full-sized natural grass soccer fields, a support building, and vehicle parking with two additional overflow parking areas between the fields and South Avalon Boulevard.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Recreation, Transportation and Traffic, Tribal Cultural Resources, Utilities and Service Systems, and Mandatory Findings of Significance. These potential impacts will be addressed in the Draft EIR.

ENVIRONMENTAL FACTORS NOT POTENTIALLY AFFECTED: Based on the Initial Study, the following environmental factors do not need to be addressed in the Draft EIR: Agriculture and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing.

PUBLIC SCOPING MEETING DATE AND LOCATION: A Scoping Meeting will be held on August 14, 2018, from 6:00 P.M. to 8:00 P.M. at the Victoria Community Regional Park, 419 Martin Luther King Jr. Street, Carson, CA 90746. Parking is available at the park.

The purpose of the Scoping Meeting is to solicit agency and other early comments regarding environmental issues to be addressed in the Draft EIR. The Scoping Meeting will provide information regarding the proposed Project and the anticipated scope of analyses to be contained in the Draft EIR. Written comments may be submitted at the Scoping Meeting or at any time before the end of scoping on **August 31, 2018**. Attendance at the Scoping Meeting is not required, and written comments on the scope of the Draft EIR by US mail or email are welcome at the County of Los Angeles Department of Public Works address provided below.

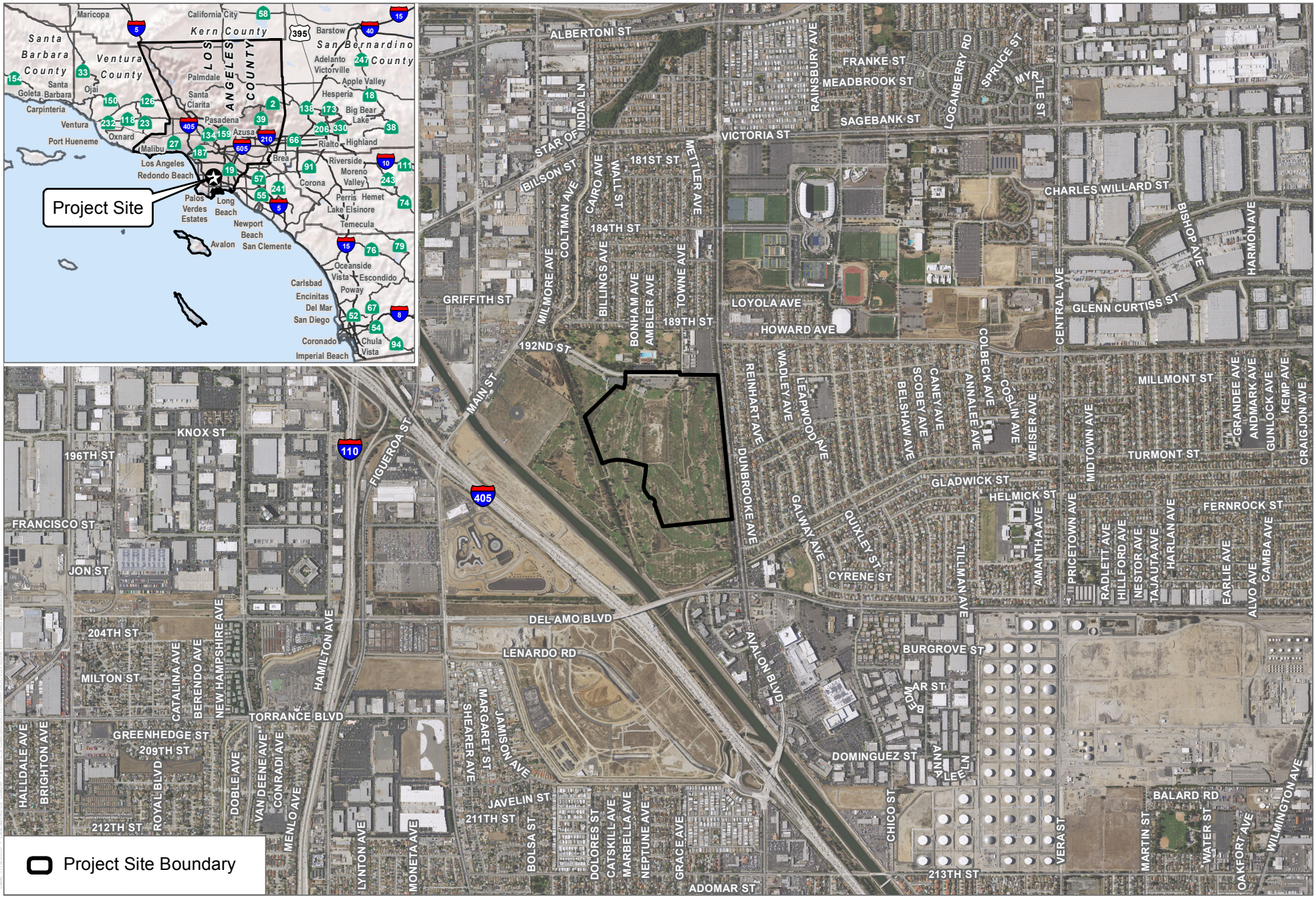
Written comments must be submitted to the County of Los Angeles by **August 31, 2018**, to be timely scoping comments for consideration in the preparation of the Draft EIR.

Please direct your comments by e-mail or U.S. mail to:

Ryan Kristan
County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Avenue, 5th Floor
Alhambra, California 91803
(626) 300-3271
E-Mail: rkristan@dpw.lacounty.gov

Sorin Alexanian
Deputy Director
Department of Regional Planning

Attachments:
Project Location Map
Conceptual Site Plan
Scoping Meeting Location Map



SOURCE: NAIP 2016

DUDEK

0 1,000 2,000 Feet

Project Location

Carol Kimmelman Sports and Academic Campus



SOURCE: NAIP 2016

DUDEK

0 500 1,000 Feet

Scoping Meeting Location Map

Carol Kimmelman Sports and Academic Campus



LEGEND

TENNIS CENTER

1. WELCOME CENTER
2. LEARNING CENTER
3. ENTRY PLAZA
4. BASKETBALL COURTS
5. COMPETITION VENUE (12 HARD COURTS)
6. PLAYER DEVELOPMENT / COLLEGIATE CENTER
7. TOURNAMENT/ LEAGUE ADMINISTRATION BUILDING
8. 100M SPRINT TRACK
9. 4 CLAY COURTS
10. MONUMENT ENTRY/ SIGN
11. CENTRAL PLAZA
12. 8 36 FT COURTS
13. 4 60 FT COURTS (+4 FUTURE COURTS)
14. TRAINING TURF
15. TENNIS CENTER COURTS (24 HARD COURTS)
16. FUTURE COVERED COURTS (6 COURTS)
17. MAINTENANCE BUILDING
18. OUTDOOR EXERCISE COURSE
19. VISITOR PARKING
20. BUS PARKING
21. EMPLOYEE PARKING
22. OVERFLOW PARKING

SOCCER CENTER

23. 2 NATURAL GRASS MULTIPURPOSE FIELDS
24. 6 FULL SIZE NATURAL GRASS SOCCER FIELDS
25. 2 FULL SIZE ARTIFICIAL TURF SOCCER FIELDS
26. SUPPORT BUIDLING
27. SOCCER PARKING
28. OVERFLOW PARKING

SOURCE: MEIS, 2018

DUDEK

Site Plan

Carol Kimmelman Sports and Academic Campus

Initial Study Checklist
Carol Kimmelman Sports and Academic Campus

Prepared for:

County of Los Angeles

Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012
Contact:
Ryan Kristan

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101
Contact: Nicole Cobleigh

JULY 2018

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AQMP	Air Quality Management Plan
BKK	Ben K. Kazarian
BMP	best management practice
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CRPR	California Rare Plant Rank
dBA	A-weighted decibel
EIR	environmental impact report
GHG	greenhouse gas
I	Interstate
K–5	kindergarten through fifth-grade
L_{eq}	equivalent sound level
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Plan
NO_2	nitrogen dioxide
O_3	ozone
OU	Operable Unit
PM_{10}	coarse particulate matter
$PM_{2.5}$	fine particulate matter
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SO_2	sulfur dioxide
USFWS	U.S. Fish and Wildlife Service

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Initial Study Checklist
Carol Kimmelman Sports and Academic Campus

1 INTRODUCTION

1. **Project title:**

   Carol Kimmelman Sports and Academic Campus Project

2. **Lead agency name and address:**

   County of Los Angeles
   Kenneth Hahn Hall of Administration
   500 West Temple Street
   Los Angeles, California 90012

3. **Contact person and phone number:**

   Ryan Kristan
   Phone: (626) 300-3271

4. **Project location:**

   340 Martin Luther King Jr. Street
   Carson, California 90746

5. **Project sponsor's name and address:**

   The Carol Kimmelman Center, LLC
   2121 East 7th Place
   Los Angeles, California 90021

6. **General plan designation:**

   Special Use Facility, County of Los Angeles General Plan
   Recreational Open Space, City of Carson General Plan

7. **Zoning:**

   OS-ORL, Open Space–Organic Refuse Landfill, City of Carson Zoning Code (Section 9151.12)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

Introduction

The Carol Kimmelman Center, LLC proposes to redevelop a portion of a golf course with new recreation uses including a new sports and academic campus (project or proposed project) on a site located at 340 Martin Luther King Jr. Street in the County of Los Angeles, City of Carson (City), as shown on Figure 1-1, Project Location. The County of Los Angeles (County) is the owner of the proposed project site and currently leases the site for the provision of golf course operations. The proposed project involves redevelopment of the existing Links at Victoria Golf Course and adjacent tennis courts (Victoria Golf Course) with new recreation programs that would offer sports and academic enrichment services to underprivileged youth in the greater Los Angeles area and recreational programs for the public. The proposed project involves the development of the Carol Kimmelman Sports and Academic Campus on approximately 87 acres in the northeastern portion of the existing 178-acre golf course.

Background

Prior to the Victoria Golf Course's current use as a County golf course, it was the site of a portion of the former Ben K. Kazarian (BKK) landfill, which operated as a Class II municipal solid waste landfill from 1948 to 1959. The California Department of Toxic Substances Control (DTSC) is overseeing the former landfill's remediation. The entire former landfill site is divided into Operable Units (OU) focused on two separate remediation operations, of which the Victoria Golf Course site is OU-2. Remediation activities at the site began in December 2006 and are ongoing. The Final Remedial Investigation/Feasibility Study Report for soil and landfill gas media was completed in 2014 and the Remedial Action Plan ("RAP") was completed in 2016. Groundwater contamination will be addressed separately as another OU for the entire former landfill and will be subject to its own Remedial Investigation/Feasibility Study and Remedial Action Plan.

Beginning in 1966, the County leased the site in connection with the opening of the Victoria Golf Course in the same year. The existing Victoria Golf Course includes an 18-hole golf course, driving range, pro shop building, and related surface parking. Plenitude Holdings, LLC is the current tenant and operator of the County Victoria Golf Course.

Proposed Project

The proposed project would consist of the redevelopment of 87 acres in the northeastern portion of the existing 187-acre Victoria Golf Course site for public recreation purposes, as shown on Figure 1-2, Site Plan. The project would include a tennis center and soccer center for underserved youth as well as programs for adults. The tennis center component would include a welcome center, tennis courts for all ages and skill levels, and training facilities. Also located in the tennis center component would be a learning center that would provide academic counseling, mentorship, and enrichment services. The soccer center component would include soccer fields, multi-purpose fields and support buildings. The project site would be developed with up to approximately 75,000 square feet of buildings, with possible expansion space for an additional 22,000 square feet of buildings. Up to an additional 5,000 square feet of miscellaneous support buildings, including maintenance facilities, restrooms, and sheds, would be constructed throughout the project.

A separate project is proposed by Plenitude Holdings, LLC (Plenitude) for the southerly portion of the existing Victoria Golf Course. As currently proposed, the Plenitude project would consist of sports, recreational and entertainment uses, restaurants, community center and community park. The Plenitude project will be included as a Related Project in the EIR.

Tennis Center

The tennis center component of the project would be approximately 29 acres and would include a 23,000-square-foot welcome center, a spectator venue with up to 12 hard courts and a total of 1,200 seats, 50 tennis courts of various sizes, a 5,000-square-foot administration building, a 13,000-square-foot player development building, and outdoor training spaces including a 100-meter sprint track, two basketball courts, a training turf a maintenance facility, and vehicle and bus parking.

Adjacent to the tennis center would be an approximately 25,000-square-foot learning center. The learning center would include classrooms, quiet rooms, and staff support for homework, counseling, and tutoring.

The welcome center and learning center would be located in the main entrance area within the northwest portion of the project site.

Soccer Center

The approximately 58-acre soccer center would provide up to two full-sized artificial turf soccer fields, two natural grass multipurpose fields, and six full-sized natural grass soccer fields, a support building, and vehicle parking with two additional overflow parking areas between the fields and South Avalon Boulevard.

Construction

Project construction is projected to begin upon project approval (estimated in April 2019) and last approximately 15 months with the intention of opening the center to the public in summer 2020. Construction activities would involve demolition of a portion of the existing golf course and associated facilities, site preparation, including compaction and importing of fill material to the site, and construction of the proposed facilities.

9. **Surrounding land uses and setting (Briefly describe the project's surroundings):**

The proposed project site is owned by the County of Los Angeles and is located in the City of Carson. The site is northeast of the Dominguez Channel and east of the junction of Interstate 405 (I-405) and I-110. The project site is bounded by Martin Luther King Jr. Street to the north, South Avalon Boulevard to the east, and the remaining portion of the Victoria Golf Course to the south and west.

Northwest of the project site are the County of Los Angeles Cricket Fields, and directly north of the project site across Martin Luther King Jr. Street are County of Los Angeles Victoria Community Regional Park and Towne Avenue Elementary School, which is a Los Angeles Unified School District kindergarten through fifth grade (K–5) school. Approximately 0.5 miles northeast of the project site is StubHub Center, and the California State University, Dominguez Hills campus is located approximately 1.2 miles northeast of the project site. East of the project site and South Avalon Boulevard is a predominantly single-family residential neighborhood.

Approximately 0.8 miles southeast of the project site is a commercial shopping center known as the South Bay Pavilion, and south of the project site is East Del Amo Boulevard and land currently used by Victoria Golf Course. West of the project site is the land currently used by Victoria Golf Course, an undeveloped swath of land between I-405 and the golf course, and the Goodyear Blimp Airship Base, the I-405, the Porsche Experience Center and a 157-acre vacant former landfill site facing the I-405 and Del Amo Boulevard.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

    - County of Los Angeles
        - Approval of ground lease – Chief Executive Office and Department of Parks and Recreation
        - Site plan review – Department of Regional Planning
        - Building permits, grading permits, and other construction-related permits – Department of Public Works
    - Other actions as may be required by other local, regional and state agencies including, but not limited to the City of Carson, the DTSC, the Los Angeles Regional Water Quality Control Board, and the South Coast Air Quality Management District (SCAQMD).

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

    Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

    The County has initiated the tribal consultation process, as required under Public Resources Code section 21080.3.1. A total of 5 letters were sent to the following Native American tribes on July 16, 2018: Fernandeno Tataviam Band of Mission Indians; San Manuel Band of Mission Indians; Tejon Indian Tribe; San Gabriel Band of Mission Indians; and Gabrieleno Band of Mission Indians – Kizh Nation.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☒ Public Services	☒ Recreation
☒ Transportation and Traffic	☒ Tribal Cultural Resources	☒ Utilities and Service Systems
☒ Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

7-30-18
Date

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2 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or

refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

2.1 Aesthetics

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS –** Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The project site is currently used as a portion of a County golf course and is visible from surrounding land uses, including I-405 to the west, Victoria Park and Towne Avenue Elementary School to the north, and the residential community to the east. The project site is not located within a designated scenic vista area, and as such, visual changes at the project site would not adversely affect scenic vistas. For those who

have visual access to the project site from public vantage points, viewers currently see open space associated with the existing golf course. Implementation of the proposed project would replace the existing recreational golf course with recreational facilities for soccer and tennis in a landscaped setting. As such, the existing open space and recreational character of the site would be maintained with project implementation. Given that the project site is not associated with any scenic vistas and that the existing open space and recreational character of the site would be retained with project implementation, impacts would be less than significant. This issue will not require further environmental analysis in the EIR prepared for the project.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. According to the California Department of Transportation (Caltrans 2018), no scenic highways are located within the vicinity of the project site. The closest officially designated state scenic highway to the project site is State Route 2, Angeles Crest Highway, located north of La Canada–Flintridge in the northern portion of Los Angeles County. The project site is not visible from this state-designated scenic highway, nor is the highway visible from the project site. As such, implementation of the proposed project would not substantially degrade scenic resources within a state scenic highway. No impacts would occur, and this issue will not require further environmental analysis in the EIR prepared for the project.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The project site is currently used as a County golf course and is visible from surrounding land uses, including I-405 to the west, Victoria Park and Towne Avenue Elementary School to the north, and the residential community to the east. For those who have visual access to the project site from public vantage points, viewers currently see green open space associated with the existing golf course, the club house, parking and fencing and lighting associated with the golf course. Implementation of the proposed project would replace the existing recreational golf course with recreational facilities for soccer and tennis within a landscaped setting. Conceptual drawings of both the tennis center and the soccer center are shown on Figure 2-1, Tennis Center, and Figure 2-2, Soccer Fields. As shown in the project renderings, the existing open space and recreational character of the site would be maintained with project implementation. Viewers to the north and east would continue to experience recreational, open space views.

As such, impacts would be less than significant and this issue will not require further environmental analysis in the EIR prepared for the project.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Potentially Significant Impact. The existing driving range at the project site includes nighttime lighting. The proposed project would include tennis and soccer facilities that would be used during evening and nighttime hours and therefore including nighttime lighting. As such, nighttime lighting is proposed as part of the project. Lighting would be directed onto the playing surfaces. However, given the proximity to nearby light-sensitive receptors there is a potential for the project to alter nighttime lighting patterns in the vicinity of the project site such that impacts would be potentially significant. The EIR prepared for the proposed project will include an evaluation of whether nighttime lighting would adversely affect adjacent light-sensitive uses.

2.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. Per the Farmland Mapping and Monitoring Program of the California Department of Conservation (DOC 2018), the project site is not mapped as prime farmland, unique farmland, or farmland of statewide importance. The project site is currently developed as a portion of a County golf course, and implementation of the proposed recreational project would not convert farmland to non-agricultural use. No impacts would occur, and this issue will not require further environmental analysis in the EIR prepared for the project.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is not zoned for agricultural use and is not under a Williamson Act contract. The project site is currently developed as a portion of a County golf course. The County General Plan Parks and Recreation Element designates the site as a "Special Use Facility."[1] As such, construction and operation of the proposed recreational project would not result in a conflict with existing zoning for agricultural use. No impacts would occur, and this issue will not require further environmental analysis in the EIR prepared for the project.

[1] According to the City of Carson General Plan (City of Carson 2004), the land use designation for the project site is Recreational Open Space. Per the City's Zoning Code, the site is zoned OS-ORL, Open Space–Organic Refuse Landfill.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project site is not zoned as forest land or timberland use. The project site is currently developed as a portion of a golf course. The County General Plan Parks and Recreation Element designates the site as a "Special Use Facility."[2] As such, construction and operation of the proposed recreational project would not result in a conflict with existing zoning for forest land or timberland use. No impacts would occur, and this issue will not require further environmental analysis in the EIR prepared for the project.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is currently developed as a portion of a County golf course and used for recreational open space. As such, construction and operation of the proposed recreational project would not result in the loss of forest land. No impacts would occur, and this issue will not require further environmental analysis in the EIR prepared for the project.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The project site is currently developed and used as a portion of a County golf course. The project site is not used for agricultural, forest land, or timberland use. Additionally, the project site is not mapped as Farmland. As such, construction and operation of the proposed recreational project would not convert or make changes to existing agricultural, Farmland, or forest land uses. No impacts would occur, and this issue will not require further environmental analysis in the EIR prepared for the project.

[2] According to the City of Carson General Plan (City of Carson 2004), the land use designation for the project site is Recreational Open Space. Per the City's Zoning Code, the site is zoned OS-ORL, Open Space–Organic Refuse Landfill.

2.3 Air Quality

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e)	Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Potentially Significant Impact. The proposed project is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of SCAQMD. The most recent applicable air quality plan is the SCAQMD 2016 Air Quality Management Plan (AQMP), which outlines reduction and control measures to mitigate emissions based on existing and projected land use and development. SCAQMD has established criteria for determining consistency with the 2016 AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook (SCAQMD 1993). These criteria are as follows:

- **Consistency Criterion No. 1**: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2**: The proposed project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Due to the earthwork required for the proposed project, including haul truck trips required to import fill material, there is a potential for the project to result in significant air quality impacts. As such, the EIR will evaluate the project's consistency with the SCAQMD 2016 AQMP based on the SCAQMD guidance.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact. The proposed project would be required to comply with all relevant federal, state, and local air quality regulations. Nonetheless, the proposed project may generate short-term criteria air pollutant emissions associated with import and movement of soil, pollutant emissions associated with entrained dust (earth movement), and internal combustion engines used by on-site construction equipment and from off-site worker vehicles and truck trips, as well as impacts to air quality during operation of the proposed project. As such, the EIR will evaluate the project's potential to violate air quality standards and/or contribute substantially to an existing or projected air quality violation.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Potentially Significant Impact. The SCAB is designated as a nonattainment area for both federal and state ozone (O_3) standards and fine particulate matter ($PM_{2.5}$) standards. The SCAB is designated as a nonattainment area for state coarse particulate matter (PM_{10}) standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area under the state and federal standards for nitrogen dioxide (NO_2), carbon monoxide (CO), and sulfur dioxide (SO_2) standards. Although the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard (EPA 2017; CARB 2017). Due to the amount of vehicle trips and quantity of earthmoving activities associated with project construction as well as potential increases in vehicle trips during project operation, air quality emissions anticipated to result from construction and operation of the proposed project would be potentially significant and as such will be quantified as part of the EIR. The analysis in the EIR will indicate whether the proposed project would result in a cumulatively considerable net increase in criteria air pollutants for which the SCAB has been designated non-attainment.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. Exhaust from construction equipment and vehicles would release air pollutants into the atmosphere. The project site is located across the street from Victoria Park, Towne Avenue Elementary School, and residential uses. Additionally, Leapwood Avenue Elementary School is located approximately 0.25 miles from the project site. Therefore, construction and operation of the proposed project may have the potential to expose sensitive receptors to increased pollutant concentrations. Accordingly, this issue will be further analyzed in the EIR.

e) Would the project create objectionable odors affecting a substantial number of people?

Potentially Significant Impact. Odor is the form of air pollution that is possibly the most obvious to the public. Odors can present significant problems for the source and its surrounding community. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving locations each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause concern.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting facilities, refineries, landfills, and dairies (SCAQMD 1993). The project would entail construction of recreational facilities, specifically tennis courts and soccer fields, and would not result in the creation of a land use that is associated with odors. Potential sources that may emit odors during construction of the proposed project would include diesel equipment, gasoline fumes, and asphalt paving materials. However, odors from these sources generally would be localized, disperse rapidly from the project site and occur at magnitudes that would not affect substantial numbers of people. In addition, the proposed project would use typical construction techniques to reduce odors in compliance with SCAQMD rules. Given the distance to the off-site receptors, nature of the potential odors, and compliance with SCAQMD it is anticipated that the proposed project would not cause an odor nuisance, and odor impacts would be less than significant. However, this issue will be further analyzed in the EIR prepared for the project.

2.4 Biological Resources

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	**BIOLOGICAL RESOURCES** – Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Potentially Significant Impact. The project site is located within the northeastern portion of the Victoria Golf Course and over 950 feet north of the Dominguez Channel. Although the recognized open space areas are relatively undeveloped, they are primarily composed of non-native ornamental landscaping with minimal native vegetation remaining; therefore,

they provide lower-quality habitat to support special-status biological resources. Additionally, urban development, major highways, and light industrial uses to the north, east, south, and west further isolate these areas.[3]

California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) searches were conducted for the Torrance U.S. Geological Survey 7.5-minute topographic quadrangle and the surrounding quadrangles (Long Beach, San Pedro, Redondo Beach, Venice, Inglewood, and South Gate). The results showed occurrences for a variety of special-status plant and wildlife species. However, the majority of these occurrences are associated with naturalized areas closer to the coast (i.e., Rancho Palos Verdes), located over 9 miles southwest of the project site.

No special-status plant or wildlife species are anticipated to occur within the project site. A biological reconnaissance-level site visit was performed on February 19, 2018, that included a visual survey of the project site plus a 300-foot area from the perimeter of the project site (study area). The majority of the project site is compacted and dominated by ornamental grasses associated with recreational golf and landscaped trees not native to the area, including Bermudagrass (*Cynodon dactylon*), creeping bentgrass (*Agrostis stolonifera*), eucalyptus (*Eucalyptus* spp.), pines (*Pinus* spp.), olive trees (*Olea europaea*), Peruvian peppertree (*Schinus molle*), and Brazilian peppertree (*Schinus terebinthifolius*). Patches of ruderal habitat dominated by non-native forbs and grasses including Russian thistle (*Salsola tragus*), wattle (*Acacia* sp.), cheeseweed (*Malva parviflora*), and red brome (*Bromus madritensis* ssp. *rubens*) were present in small narrow patches throughout the project site. Occasionally, disturbed coastal sage scrub vegetation was associated with portions of these ruderal patches of vegetation identified on site. The disturbed coastal sage scrub vegetation on site was dominated by Russian thistle and wattle, with sparse amounts of California sagebrush (*Artemisia californica*), California brittlebush (*Encelia californica*), and buckwheat (*Eriogonum fasciculatum*) present. The coastal sage scrub vegetation present within the project site is too disturbed and minimal to provide suitable habitat to support special-status plant or wildlife species.

Although it is unlikely that special-status plant and/or wildlife species would occur within the project site, there is a potential that special-status plant and/or wildlife species could occur

[3] As described in the City's General Plan EIR (City of Carson 2002), the City of Carson does not have any sensitive or special-status species. According to the Carson General Plan Open Space and Conservation Element, the City's open space areas are composed of Recreational Open Space (i.e., Victoria Golf Course and Dominguez Channel (a concrete-lined flood control channel)), as well as General Open Space (i.e., the Goodyear Blimp Airship Base, drainage courses, and utility transmission corridors).

within marginal habitat present within the areas immediately west and south of the project site (primarily within the western and southern portions of the Victoria Golf Course). Thus, although the majority of special-status species identified in the CNDDB and CNPS searches are expected to occur within better-quality habitat closer to the coast, the areas immediately surrounding the project site to the west and south have a high potential to support the CNPS California Rare Plant Rank (CRPR) 1B.1 southern tarplant (*Centromadia parryi* ssp. *australis*), and a moderate potential to support the CRPR 2B.2 mud nama (*Nama stenocarpa*) and the federally listed as threatened and state species of special concern coastal California gnatcatcher (*Polioptila californica californica*).

Southern Tarplant. Southern tarplant is a CRPR 1B.1 species typically found in the margins of marshes and swamps, vernally mesic valley and foothill grassland, and vernal pools. Southern tarplant is an annual herb that typically blooms between May and November. This species has been documented along the banks of the Dominguez Channel approximately 950 feet southwest of the project site. The banks of the Dominguez Branch Channel, a concrete-lined channel that runs along a portion of the western border of the project site, may also provide habitat suitable to support this species. These channels are not expected to be impacted by the proposed project activities. However, potential indirect impacts (i.e., changes in hydrology and generation of fugitive dust and chemical pollutants) may occur; thus, this issue will be further evaluated in the EIR prepared for the proposed project.

Mud Nama. Mud nama is a CRPR 2B.2 species typically found in the margins or marshes and swamps (i.e., lake margins and riverbanks). Mud nama is an annual herb that is typically in bloom between January and July. According to CNDDB, the closest documented occurrence for this species is in the vicinity of Harbor Lake and the surrounding marsh areas approximately 4.1 miles southwest of the project site (CDFW 2018). This record dates back to 1924 and is the only known source of information for this site. This species has the potential to occur along the banks of the Dominguez Channel, approximately 950 feet southwest of the project site, as well as along the banks of the Dominguez Branch Channel, a concrete-lined channel that runs along a portion of the western border of the project site, based on the presence of suitable riparian habitat. These channels are not expected to be impacted by the proposed project activities. However, potential indirect impacts (i.e., changes in hydrology and generation of fugitive dust and chemical pollutants) may occur. Thus, this issue will be further evaluated in the EIR prepared for the proposed project.

Coastal California Gnatcatcher. Coastal California gnatcatcher is federally listed as threatened and is a CDFW species of special concern (CDFW 2018). This small songbird

is a year-round resident found below 2,500 feet above mean sea level in Southern California. This subspecies occurs from northwest Baja California, Mexico, to Ventura County, California. The highest densities for coastal California gnatcatcher occur in coastal areas of Orange and San Diego Counties (Mock 2004), with small, disjunct populations documented for Ventura and Los Angeles Counties (Atwood et al. 1998). Coastal California gnatcatchers generally prefer open sage scrub habitats with California sagebrush as a dominant or co-dominant species. Nest placement is typically in areas with less than 40% slope gradient (Mock 2004).

The larger patches of coastal scrub habitat (within areas approximately 20 feet to 500 feet west and approximately 50 feet to 200 feet south of the project site) provide potentially suitable, though marginal, habitat for the species. These areas are fragmented, occurring in small patches throughout the surrounding golf course outside of the project site, particularly in areas west of the Dominguez Branch Channel. ECORP Consulting Inc. (ECORP 2015) conducted focused protocol-level surveys for coastal California gnatcatcher in 2015 (USFWS 1997), with negative findings. Nevertheless, if occupied coastal California gnatcatcher is present within 500 feet of the proposed project, potential indirect effects (i.e., increased noise levels, generation of fugitive dust, and increased human activity) to coastal California gnatcatchers within marginally suitable coastal sage scrub habitat west and south of the project site could occur. Due to potential indirect effects to coastal California gnatcatcher if present on site, the proposed project's effects on special-status species would potentially be significant. As such, this issue will be further evaluated in the EIR prepared for the proposed project.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Potentially Significant Impact. The riparian habitat and wetland known to occur at the lake within the Carson Harbor Village Mobile Home Park (also known as the marsh at Carson Harbor Village) is the only open space area with natural resources to support the preservation of plant and wildlife species, as well as to provide other ecological values and functions.[4] This habitat is located approximately 0.75 miles north of the project site. Additionally, two drainages are mapped within the general study area, but outside the project site: the concrete-lined Dominguez Channel and the concrete-lined Dominguez Branch Channel (which is a tributary to Dominguez Channel). These channels are both mapped as aquatic resources by the USFWS in the National Wetlands Inventory (USFWS

[4] City of Carson General Plan (2004) and City of Carson General Plan EIR (2002).

2018). Dominguez Channel is located more than 950 feet southwest of the project site and is bordered by a fence; therefore, it is not anticipated to be impacted by the proposed project. However, the concrete-lined Dominguez Branch Channel runs along a portion of the western border of the project site, and supports native and non-native riparian vegetation along its bank. The Dominguez Branch Channel conveys water from a marsh located at Carson Harbor Village through a concrete channel to the north (upstream) of the project site to Dominguez Channel at its southern (downstream) extent (south of the project site). Although direct impacts are not expected to occur to Dominguez Branch Channel, indirect impacts (i.e., changes in hydrology and generation of fugitive dust and chemical pollutants) could result.

There is the potential for the project to result in significant impacts from indirect impacts to riparian or other sensitive natural communities. As such, the EIR will evaluate the project's potential impacts on riparian or other sensitive natural communities.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Potentially Significant Impact. There are no wetlands or potentially jurisdictional water features located on the project site. Two drainages occur within the general study area: the concrete-lined Dominguez Channel and the concrete-lined Dominguez Branch Channel, which is a tributary to Dominguez Channel. As previously discussed, the Dominguez Channel is located more than 950 feet southwest of the project site and is bordered by a fence; therefore, it is not anticipated to be impacted by the proposed project. The concrete-lined Dominguez Branch Channel runs along a portion of the western border of the project site. Both channels support native and non-native riparian vegetation along their bank. The Dominguez Branch Channel conveys water from a marsh located at Carson Harbor Village (located approximately 0.75 miles north of the project site) through a concrete channel to the north (upstream) of the project site, and conveys water to Dominguez Channel at its southern (downstream) extent (south of the project site). Although direct impacts are not expected to occur to Dominguez Branch Channel, indirect impacts (i.e., changes in hydrology and generation of fugitive dust and chemical pollutants) could result in potentially significant impacts. As such this issue will be further evaluated in the EIR.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Potentially Significant Impact. As discussed previously, the project site is located in an urban area and has been used as a public golf course since the late 1960s. The project site is dominated by planted non-native grasses and ornamental trees, and contains limited patches of ruderal habitat with minimal disturbed coastal sage scrub vegetation present among the ruderal habitat. The habitat on site is fragmented, and the golf course is isolated by urban development and major highways on all sides. Overall, the project site supports minimal native habitat and therefore represents lower-quality habitat with limited overall value. The project site does not support wetlands or riparian areas and is not part of a wildlife corridor (South Coast Wildlands 2008; Department of Regional Planning 2014). However, Dominguez Channel (950 feet southwest of the project site) and the Dominguez Branch Channel (which runs along a portion of the western border of the project site) could facilitate wildlife movement through the general area. These channels are not expected to be impacted by the proposed project. Additionally, more common localized wildlife species could use the golf course to move through the area. However, the overall use of this area is not anticipated to change greatly as a result of the proposed project; therefore, the area would continue to facilitate general wildlife movement after project construction. Migratory fish would not be found on site and native resident or migratory wildlife species are not anticipated. The project site does contain mature trees that could be used by migratory or nesting birds (including raptors). The Migratory Bird Treaty Act and California Fish and Game Code Sections 86, 3503, 3503.5, and 3513 would protect migratory and nesting birds from significant impacts resulting from the proposed project. Impacts to migratory or nesting birds could potentially be significant. As such, this issue will be further evaluated in the EIR.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Potentially Significant Impact. The project site does not occur within any designated regional habitat linkages or Significant Ecological Areas (SEAs) identified within the Los Angeles County General Plan EIR (2014). The County of Los Angeles Oak Tree Ordinance, codified in Section 22.46.2100 of the Los Angeles County Code of Ordinances (2013), preserves and protects oak trees within the County of Los Angeles. This Ordinance restricts oak tree removal or encroachment within the protected zone without a permit. The protected zone is defined as the area within the drip line of an oak tree, extending from the

drip line to a point at least 5 feet outside the drip line or 15 feet from the trunk of an oak tree (whichever distance is greater).

Protected oak trees are not anticipated to occur within the project site; however, additional information is needed to determine whether oak trees are present and whether impacts to oak trees could potentially be significant. As such, this issue will be further evaluated in the EIR.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is not located within an adopted habitat conservation plan or natural community conservation plan (CDFW 2017). Additionally, the project does not conflict with the provisions of the County of Los Angeles General Plan (County of Los Angeles 2015a). As previously discussed, the City's open space areas are composed of Recreational Open Space, including the County Victoria Golf Course and Dominguez Channel (a concrete-lined flood control channel) (City of Carson 2004). Although the project site occurs within the northeastern portion of the Victoria Golf Course, which is recognized as an open space area, the general use of the area will remain the same (from existing golf course to a new sports recreation and academic resources facility). Additionally, the Dominguez Channel is a fenced concrete-lined flood control channel that is located more than 950 feet southwest of the project site; therefore, the proposed project activities are not anticipated to impact this channel. As such, the proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. No impact would occur and this issue will not be further evaluated in the EIR prepared for the proposed project.

2.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Potentially Significant Impact. The Victoria Golf Course opened in approximately 1966 and is therefore more than 45 years old. In order to determine if the proposed project has the potential to impact historical resources under CEQA, the lead agency has a responsibility to record and evaluate the golf course in consideration of California Register of Historical Resources eligibility criteria and integrity requirements (California Public Resources Code, Section 21084.1; 14 CCR 15064.5(3)). The findings of the significance evaluation will reveal whether the proposed project has the potential to impact historical resources under CEQA and will assist in the development of appropriate mitigation measures (if required). As such, the potential for the project to cause a substantial adverse change in the significance of a historical resource will be evaluated in the EIR prepared for the project.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Potentially Significant Impact. The proposed project involves the redevelopment of a portion of the existing Victoria Golf Course site with a tennis, soccer, and academic campus. DTSC's 2016 Remedial Action Plan (RAP) for soil and soil gas media requires a three-foot soil cap over the project site. The project involves compaction of the existing soil at the site above the cap followed by import of fill to the site; therefore, it is unlikely that archaeological resources would be encountered.

While it is unlikely that archaeological resources (sites, features, or artifacts) would be exposed during construction activities; further investigation will be undertaken through a California Historical Resources Information System records search and outreach to

the Native American Heritage Commission for a sacred lands file search and the completion of tribal consultation. The results will be discussed in the EIR prepared for the project.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially Significant Impact. The proposed project involves the removal of a portion of the existing Victoria Golf Course and the replacement of the County golf course with a tennis, soccer, and academic campus. DTSC's 2016 RAP for soil and soil gas media requires a three-foot soil cap over the project site. To avoid impacting remedial measures taking place at the site under the RAP, the project involves compaction of the existing soil at the site above the cap followed by import of fill to the site; therefore, it is unlikely that paleontological resources would be encountered.

While it is unlikely that paleontological finds would be encountered, further investigation will be undertaken through a records search conducted by the Natural History Museum of Los Angeles County. The results of these investigations will be discussed in the EIR prepared for the proposed project.

d) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. The proposed project involves the removal of a portion of the existing Victoria Golf Course and the replacement of the golf course with a tennis, soccer, and academic campus. DTSC's 2016 RAP for soil and soil gas media requires a three-foot soil cap over the project site. The project involves compaction of the existing soil at the site above the cap followed by import of fill to the site; therefore, it is unlikely that human remains would be encountered. Nonetheless, in the event that unexpected human remains are encountered, existing regulations through California Health and Safety Code, Section 7050.5 et seq., state that if human remains are discovered during project construction, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code, Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition of the remains has been made. If the County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time. Subsequently, the Native American Heritage Commission shall identify the most likely descendant. The most likely descendant shall then make recommendations and engage in consultations concerning the

treatment of the remains as provided in California Public Resources Code, Section 5097.98. Through compliance with existing codes, impacts to resources would be less than significant, and this issue will not be further evaluated in the EIR prepared for the proposed project.

2.6 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☒	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☒	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The project site is not located within an identified Alquist-Priolo Earthquake Fault Zone. However, the project site is located in the seismically active Southern California region. Structures and people located on the project site do have the potential to be subject to strong seismic ground shaking; however, the site is not identified as being within an Alquist-Priolo Earthquake Fault Zone. As such, impacts would be less than significant, and this issue will not require further analysis in the EIR prepared for the project.

ii) Strong seismic ground shaking?

Potentially Significant Impact. The project site is located in the seismically active Southern California region, and the closest fault to the project site is the Avalon–Compton Fault, identified as being within the Newport–Inglewood–Rose Canyon Fault Zone. This fault is located 1.8 miles northwest of the project site. As such, structures and people located on the project site do have the potential to be subject to strong seismic ground shaking. This issue will be further evaluated in the EIR prepared for the project.

iii) Seismic-related ground failure, including liquefaction?

Potentially Significant Impact. The project site is located in the seismically active Southern California region and is located within an identified liquefaction zone. As such, structures and people located on the project site do have the potential to be subject to seismic-related ground failure associated with liquefaction. This issue will be further evaluated in the EIR prepared for the project.

iv) Landslides?

Less Than Significant Impact. The project site is located within a relatively flat area and is relatively flat itself. As such, given the limited slope of the site and surrounding area, risks to structures and people resulting from landslides are minimal. Impacts would be less than significant, and this issue will not require further analysis in the EIR prepared for the project.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Potentially Significant Impact. Implementation of the proposed project would result in substantial earthwork, including compaction and the import of new soil to the site. As such, there is the potential for soil erosion to occur. This impact will be further evaluated in the EIR prepared for the project.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Potentially Significant Impact. The project site is located in the seismically active Southern California region and is located within an identified liquefaction zone. As such, structures and people located on the project site do have the potential to be subject to seismic-related ground failure associated with liquefaction. This issue will be further evaluated in the EIR prepared for the project.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Potentially Significant Impact. The project site was historically used as a landfill, and as such, settlement and changes to the soil character of the project site are constantly occurring. Given the nature of the soil at the project site, this issue will require further evaluation in the EIR prepared for the project.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project would be connected to existing utility systems, including sewer lines. No septic tanks or alternative wastewater disposal systems would be used for the project. Therefore, no impacts would occur, and this issue will not be further analyzed in the EIR prepared for the project.

2.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Potentially Significant Impact. Greenhouse gas (GHG) emissions would be produced by project-related short-term construction activities as well as by project operations. Construction activities would result in GHG emissions from heavy construction equipment, haul trips of imported soil, truck traffic, and worker trips to and from the project site. Because global climate change is a cumulative impact, the proposed project would have a potential impact through its incremental contribution of GHG emissions combined with the cumulative increase of all other sources of GHG emissions. As such, impacts associated with GHG emissions would be potentially significant. The EIR will analyze GHG emissions and determine whether the proposed project would result in a significant cumulative increase in GHG emissions.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. The South Bay Cities Council of Governments has prepared an Energy Efficiency Climate Action Plan for the City of Carson, and the County has adopted a Community Climate Action Plan, both of which provide objectives and strategies for the City and County to meet their energy and GHG reduction goals. The project has the potential to result in GHG emissions that should be considered in light of the adopted plans for reducing GHG emissions. Further investigation is required to determine whether the proposed project would be consistent with applicable plans, policies, or regulations. Impacts would be potentially significant, and this issue will be further analyzed in the EIR.

2.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Potentially Significant Impact. The proposed project would be located within what was formerly the BKK Carson landfill, which operated as a Class II landfill from 1948 to 1959. The Carson landfill was permitted to accept inert solid fill, household and commercial

refuse, garbage, and liquids and semi-liquids. DTSC is overseeing the former landfill's remediation. Remediation activities began at the site in December 2006 and are still ongoing. Further investigation is required to determine whether the proposed project would have the potential to create a hazard to the public or the environment. Impacts would be potentially significant, and this issue will be further analyzed in the EIR.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Potentially Significant Impact. The proposed project would be located within what was formerly the BKK Carson landfill, which operated as a Class II landfill from 1948 to 1959. The site was permitted to accept inert solid fill, household and commercial refuse, garbage, and liquids and semi-liquids. DTSC is overseeing the former landfill's remediation. Remediation activities began at the site in December 2006 and are still ongoing. Further investigation is required to determine whether the proposed project would have the potential to create a hazard to the public or the environment through upset or accident conditions involving the release of hazardous materials into the environment. Impacts would be potentially significant, and this issue will be further analyzed in the EIR.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Potentially Significant Impact. The proposed project site is located immediately south of Towne Avenue Elementary School, a Los Angeles Unified School District K–5 school. Additionally, Leapwood Avenue Elementary School, another Los Angeles Unified School District K-5 school, is located approximately 0.25 miles from the project site. As discussed in Subsection 2.8(d), the project site is also included on a list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5. As such, further investigation is required to determine whether the proposed project would have the potential to create a hazard to the public or the environment. Impacts would be potentially significant, and this issue will be further analyzed in the EIR.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Potentially Significant Impact. The proposed project is located on a site that is included on a list of hazardous materials sites compiled pursuant to California Government Code, Section 65962.5. As such, further investigation is required to determine whether the proposed project would have the potential to create a hazard to the public or the environment. Impacts would be potentially significant, and this issue will be further analyzed in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is not located within an airport land use plan or within 2 miles of an existing public airport. The closest public airports to the project site are Zamperini Field, approximately 5.4 miles southwest of the project site; Hawthorne Municipal Airport, approximately 6 miles northwest of the project site; and Long Beach Airport, approximately 6.6 miles southeast of the project site. As such, project implementation would not result in a safety hazard for people residing or working in the project area due to proximity to public use airports. No impacts would occur, and this issue will not be further analyzed in the EIR prepared for the project.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Potentially Significant Impact. The project site is located adjacent to, and immediately east of, the Goodyear Blimp Airship Base, a private airbase used solely for the Goodyear Blimp. This airbase has been used by the Goodyear Blimp since January 1968. The project would replace a portion of the existing golf course with new recreational and academic facilities that are similar to the existing recreational use of the site. Replacement of a golf course area with a tennis center, soccer fields, and a building providing academic resources to area youth would introduce additional sources of nighttime lighting as well as more buildings and structures on the project site. As such, the potential safety hazards associated with the project being located adjacent to the Goodyear Blimp Airship Base will be evaluated in the EIR prepared for the project.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The project site is located southwest of the intersection of Martin Luther King Jr. Street and South Avalon Boulevard, both major thoroughfares in the City of Carson. According to the County of Los Angeles, Department of Public Works (DPW 2018), I-405, located west of the project site, is a primary freeway disaster route, and South Avalon Boulevard, located immediately east of the project site, is designated a secondary disaster route. Disaster routes are freeway, highway, or arterial routes pre-identified for use during times of crisis. These routes are used to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property, and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing, and restoration over all other roads. Implementation of the proposed project would occur on the project site itself, and no roadways would be closed during project construction or operation such that disaster routes would be compromised. As such, impacts would be less than significant, and this issue will not be further evaluated in the EIR prepared for the project.

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. The project site is located in a developed area of the City of Carson and not close to any wildlands that could be subject to wildfire. North of the project site is Victoria Park, which is a recreational open space with trees. East of the project site is a residential community, south of the project site is commercial development, and west of the project site is undeveloped land and I-405. Although open space with vegetation is located north and west of the project site, risk associated with wildland fires is minimal, and emergency fire service would be readily provided by the County via Martin Luther King Jr. Street and South Avalon Boulevard. As such, risks from wildland fires would be less than significant, and this issue will not be further evaluated in the EIR prepared for the project.

2.9 Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	**HYDROLOGY AND WATER QUALITY** – Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☒	☐	☐	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☒	☐	☐	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐	☐	☐
f)	Otherwise substantially degrade water quality?	☒	☐	☐	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☒	☐	☐	☐
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☒	☐	☐	☐
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements?

Potentially Significant Impact. The proposed project would be located on a site known to contain hazardous soils and groundwater. Although project construction and operation would comply with all water quality standards and waste discharge requirements, given the nature of the known contamination at the project site, this issue will require further evaluation in the EIR prepared for the project.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Potentially Significant Impact. The proposed project would be located on a site known to contain hazardous substances in soils and groundwater associated with its past use as a landfill. DTSC is overseeing the investigation and remediation of site soil and groundwater. Implementation of the proposed project would not draw upon groundwater supplies. However, project implementation would increase the amount of impervious surface at the site, when compared to the existing golf course at the site. Given the nature of the site, the proposed increase in impervious surfaces associated with the project, and the ongoing groundwater investigation and remediation efforts, this issue will require further evaluation in the EIR prepared for the project.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Potentially Significant Impact. The proposed project would be located on a site known to contain hazardous substances in soils and groundwater associated with its past use as a landfill. Given the soil settlement that occurs at the site, drainage patterns have the potential to shift. Implementation of the proposed project would require site preparation, including compaction and importing of fill to the site, which could result in alteration of existing drainage patterns. As such, this issue will require further evaluation in the EIR prepared for the project.

d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Potentially Significant Impact. The proposed project would be located on a site known to contain hazardous substances in soils and groundwater associated with its past use as a landfill. Given the soil settlement that occurs at the site, drainage patterns have the potential to shift. Implementation of the proposed project would require site preparation, including compaction and importing of fill to the site, which could result in alteration of existing drainage patterns. As such, this issue will require further evaluation in the EIR prepared for the project.

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Potentially Significant Impact. The proposed project would be located on a site known to contain hazardous substances in soils and groundwater associated with its past use as a landfill. Project implementation would alter existing stormwater drainage patterns. As such, the potential for the project to impact the capacity of existing or planned stormwater drainage system or provide additional sources of polluted runoff will require further evaluation in the EIR prepared for the project.

f) Would the project otherwise substantially degrade water quality?

Potentially Significant Impact. The proposed project would be located on a site known to contain hazardous substances in soils and groundwater associated with its past use as a landfill. Project implementation would alter existing conditions at the project site. As such, the potential for the project to degrade water quality will require further evaluation in the EIR prepared for the project.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project involves the redevelopment of a portion of the existing Victoria Golf Course to a sports and academic campus with a tennis center, soccer fields, and an academic resources building designed to serve youth in the surrounding community. No housing is proposed as part of this project. As such, the project would not place housing within

a 100-year flood hazard area, and no impacts would occur. This issue will not require further evaluation in the EIR prepared for the project.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Potentially Significant Impact. Adjacent to the project site to the west is the Dominguez Branch Channel that is also identified as a 100-year flood hazard area. As such, the potential for structures proposed as part of the project to impede or redirect flood flows will require further evaluation in the EIR prepared for the project.

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Potentially Significant Impact. The project site is not located on any California Department of Conservation Tsunami Inundation Maps (DOC 2016). However, west of the project site is Dominguez Channel, the overflow of which would have the potential to result in flooding. As such, the potential for flooding to expose people or structures to significant loss will require further evaluation in the EIR prepared for the project.

j) Would the project result in inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. The tsunami inundation hazard maps, published by the California Department of Conservation, show that the project site is not within a tsunami inundation zone (DOC 2016). Additionally, the project site is located within a primarily flat and urbanized area. As such, the potential for the project to be affected by a seiche from an upstream water source or mudflows is limited. Impacts would be less than significant, and this issue will not be further analyzed in the EIR prepared for the project.

2.10 Land Use and Planning

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	**LAND USE AND PLANNING** – Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. The project site is currently used as a County golf course and is located south of an existing park and elementary school, west of a residential community, and north of commercial uses. Implementation of the proposed project would convert existing open space recreational golf uses to open space recreational tennis and soccer uses. The site in its current condition serves as a transition between freeway uses to the west, commercial uses to the south, residential uses to the east, and additional recreational and educational uses to the north. Redevelopment of a portion of the County golf course would maintain this transition and would not form any new barriers or divisions. As such, no impacts would occur, and this issue will not be further evaluated in the EIR prepared for the project.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project site is currently used as a County golf course and is located within the South Bay Planning Area of the County of Los Angeles General Plan (County of Los Angeles 2015b). Golf courses are considered Special Use Facilities, according to the County General Plan Parks and Recreation Element (County of Los Angeles 2015c). Special Use Facilities are generally single purpose facilities that serve greater regional recreational or cultural needs. There is no size criteria or service radius areas associated with Special Use Facilities.

The Parks and Recreation Element identifies the following goals related to preserving and enhancing parkland and recreational opportunities throughout the County:

- Goal 1. Enhance active and passive park and recreation opportunities for all users.
- Goal 2. Enhance multi-agency collaboration to leverage resources.
- Goal 3. Acquisition and development of additional parkland.
- Goal 4. Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.
- Goal 5. Protection of historical and natural resources on County park properties.
- Goal 6. A sustainable parks and recreation system.

Implementation of the proposed project would replace the existing County golf course, an identified Special Use Facility, with a new tennis, soccer and youth resources center. This new use would also be considered a Special Use Facility. Through project implementation, an increased number of individuals would have access to new recreational opportunities associated with tennis and soccer. The project would be directly consistent with Goals 1, 2 and 6 in the Parks and Recreation Element of the County General Plan. As such, use of the site for continued recreational purposes, as proposed, would not conflict with the County's General Plan or goals specific to preserving and enhancing parkland and recreational opportunities. As such, no impacts would occur, and this issue will not be further evaluated in the EIR prepared for the project.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The project site is not located within or subject to any habitat conservation plans or natural community conservation plans. The conversion of the existing golf course to soccer fields and tennis courts would not conflict with habitat conservation or natural community conservation plans. No impacts would occur, and this issue will not be further analyzed in the EIR prepared for the project.

2.11 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The project site is currently used as a portion of a County golf course and is undergoing remediation for historical use as a landfill. No mineral resources are accessible from or produced by the project site. As such, implementation of the proposed project would not result in the loss of availability of a known mineral resource. No impacts would occur, and this issue area will not be further evaluated in the EIR prepared for the project.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The project site is currently used as a portion of a County golf course and is undergoing remediation for historical use as a landfill. No mineral resources are accessible from or produced by the project site. The project site is not delineated as an important mineral resource recovery site in any land use plans. As such, implementation of the proposed project would not result in the loss of availability of a known mineral resource. No impacts would occur, and this issue area will not be further evaluated in the EIR prepared for the project.

2.12 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact. The proposed project site is bordered by parkland and an elementary school to the north and a residential community to the east. As such, construction activities would potentially expose nearby sensitive receptors to noise levels above established standards. Although construction activity would be temporary, some activities may be audible at nearby noise-sensitive receptors. Because construction activities have the potential to result in noise levels above established standards, impacts would be potentially significant. Operation of the proposed project would increase the intensity of uses at the site with the provision of the tennis center and soccer fields. Impacts

from operations could result in potentially significant impacts. As such, this issue will be further evaluated in the EIR prepared for the project.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. Certain activities during project construction may expose persons to excessive groundborne vibration or noise levels. Although this impact would be temporary, related only to the construction phase of the proposed project, it may still be considered significant. Further evaluation of potentially significant impacts related to groundborne vibration and noise generated by construction activities for the proposed project will be conducted in the EIR prepared for the project.

The operation of the proposed project, specifically use of the tennis courts, soccer fields, and the academic resources building for community youth, would not create any groundborne vibration and noise. Impacts would be less than significant. As such, only groundborne vibration and noise related to construction will be further evaluated in the EIR prepared for the project.

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. The proposed project involves the replacement of a portion of the existing County Victoria Golf Course with a new sports and academic campus consisting of tennis facilities, soccer fields, and a building housing academic support services for community youth. Construction activities would generate temporary increases in ambient noise levels. Once in operation, the project does have the potential to result in permanent increases in ambient noise levels due to the extended hours of use. Nighttime lighting would allow the facility to be used well beyond sunset. As such, project operations could create a permanent increase in ambient noise levels; therefore, this issue will be further analyzed in the EIR prepared for the project.

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. The proposed project site is bordered by parkland and an elementary school to the north and a residential community to the east. As such, construction activities could result in substantial temporary or periodic increases in ambient noise levels in the project vicinity. Additionally, during project operations, there is the

potential that use of soccer fields and the tennis center would have the potential to result in noise level increases due to potential increased use of the site. Further analysis will be required in the project EIR to determine the potential for noise impacts associated with project construction and operation.

e) Would the project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within an airport land use plan or within a 2-mile radius of any public airport or public use airport. No impact would occur, and this issue will not be further analyzed in the EIR prepared for the project.

f) Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The project site is located immediately east of the Goodyear Blimp Airship Base, a private airbase used solely for the Goodyear Blimp. This airbase has been used by the Goodyear Blimp since January 1968 and has not posed a safety or hazard risk to golfers at the Victoria Golf Course. The project would replace the existing golf course with new recreational and academic facilities that are similar to the existing recreational use of the site. Noise associated with the Goodyear Blimp operations is solely related to blimp departures and arrivals, and due to the nature of the motors used in the blimp, such noise is minimal. As with current operations, recreational uses would be located adjacent to the airship base, and these would not expose people in the project area to excessive noise levels. Impacts would be less than significant, and this issue will not be further analyzed in the EIR prepared for the project.

2.13 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed project involves the removal of the northeastern 87 acres of the existing County Victoria Golf Course and replacing it with a tennis, soccer, and academic campus designed to serve youth in the City of Carson, South Los Angeles and the greater Los Angeles area. No new homes would be constructed as a part of this project, nor would the project result in substantial increases in employment at the project site or within the City of Carson. Additionally, implementation of the proposed project would not require installation of new roadways, public services, or utilities; the site is currently served by existing roadways, utilities, and services, and these services would be maintained as part of the proposed project. Therefore, implementation of the proposed project would not induce growth, and impacts would be less than significant; therefore, this issue will not require further analysis in the EIR prepared for the project.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. Implementation of the proposed project would result in the removal of the northeastern 87 acres of the existing County Victoria Golf Course and the construction of a new tennis, soccer, and academic campus. No housing is currently located on the project site, and project implementation would not require demolition of existing housing or construction of new housing. As such, no impacts to housing would occur, and this issue will not require further evaluation in the EIR prepared for the project.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Implementation of the proposed project would result in the removal of the northeastern 87 acres of the existing County Victoria Golf Course and the construction of a new tennis, soccer, and academic campus. No housing is currently located on the project site,

and project implementation would not displace any individuals such that construction of new housing would be required. No displacement impacts would occur, and this issue will not require further evaluation in the EIR prepared for the project.

2.14 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☒	☐	☐	☐
Police protection?	☒	☐	☐	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Potentially Significant Impact. Fire protection is provided to the project site by the County of Los Angeles. Implementation of the proposed project would introduce more intensive uses to the project site such that an increase in the demand for fire protection services could occur. As such, impacts would be potentially significant, and this issue area will be evaluated further in the EIR prepared for the project.

Police protection?

Potentially Significant Impact. Police protection is provided to the project site by the County Sheriff's Department. Implementation of the proposed project would introduce more intensive uses to the project site such that an increase in the demand for police

protection services could occur. As such, impacts would be potentially significant, and this issue area will be evaluated further in the EIR prepared for the project.

Schools?

Less Than Significant Impact. Schools located in the City of Carson are part of the Los Angeles Unified School District. The proposed project would replace the northeastern 87 acres of the existing County Victoria Golf Course with a recreational sports and academic campus. Implementation of the project would not result in increased demand for schools or require the construction of new schools. The project is intended to serve the existing community and would not result in population growth such that new schools would be required. As such, impacts would be less than significant, and this issue area will not be further evaluated in the EIR prepared for the project.

Parks?

Less Than Significant Impact. The proposed project would replace the northeastern 87 acres of the existing County Victoria Golf Course with a recreational sports and academic campus. Per the County's General Plan Parks and Recreation Element, the existing golf course is considered a Special Use Facility. The proposed project would replace this Special Use Facility with a new Special Use Facility. Implementation of the project would not result in increased demand for parks or require the construction of new parks associated with an increased demand. The project is intended to serve the existing community and would not result in population growth such that new parks would be required. As such, impacts would be less than significant, and this issue area will not be further evaluated in the EIR prepared for the project.

Other public facilities?

Less Than Significant Impact. The proposed project would replace the northeastern 87 acres of the existing County Victoria Golf Course with a recreational sports and academic campus. Implementation of the project would not result in increased demand for libraries or other public facilities such that the construction of new facilities associated with increased demand would be required. The project is intended to serve the existing community and would not result in population growth such that new libraries or other public facilities would be required. As such, impacts would be less than significant, and this issue area will not be further evaluated in the EIR prepared for the project.

2.15 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☒	☐	☐	☐

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The proposed project would be located on a portion of the existing County Victoria Golf Course. Immediately north of the project site is Victoria Park. The recreational and academic uses associated with the proposed project are designed to serve youth in the community. By attracting more youth to the project site, the project does have the potential to attract more users to recreational uses in the project vicinity, especially to Victoria Park, north of the project site. However, the recreational uses proposed as part of this project would complement the recreational use of Victoria Park and would provide increased recreational opportunities. As such, project implementation would not result in increased use such that deterioration of existing recreational facilities would occur. Impacts would be less than significant, and this issue will not require further evaluation in the EIR prepared for the project.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Potentially Significant Impact. The proposed project involves the construction of a new recreational facility with a tennis center, soccer fields, and an academic resources center. As discussed in this Initial Study, there is a potential for construction and/or operation of the proposed project to result in impacts to the environment. An EIR will be prepared addressing all potentially significant impacts identified in this Initial Study. Separate

technical analyses and chapters focused specifically on the potentially significant impacts will be included in the EIR.

2.16 Transportation and Traffic

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☒	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

a) ***Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?***

Potentially Significant Impact. The proposed project involves the replacement of the northeastern 87 acres of the existing County Victoria Golf Course with a sports and academic campus. Construction would result in construction employee trips as well as truck trips to haul imported soil to the project site. Although construction conditions would be temporary, occurring only during the time needed for construction of the proposed facilities, they may cause an increase in traffic that would be substantial in relation to the existing traffic load and capacity of the street system. During project operations, there is also a chance that more trips would be generated by the project site than the existing trips generated by the golf course. As such, further evaluation of potentially significant impacts related to traffic generated by the proposed project will be included in the EIR prepared for the project.

b) ***Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

Potentially Significant Impact. Construction of the proposed project would require grading and import of soil to level the project site, thereby generating a potentially significant number of haul truck trips. Although impacts would be temporary and related only to the construction phase of the proposed project, construction traffic may exceed level of service standards established by the County congestion management agency for designated roads or highways. During project operation, there is also a chance that more trips would be generated by the project site than the existing trips generated by the golf course. As such, further evaluation of potentially significant impacts related to traffic generated by the proposed project will be conducted in the EIR prepared for the project.

c) ***Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

Potentially Significant Impact. The project site is located adjacent to, and immediately east of, the Goodyear Blimp Airship Base, a private airbase used solely for the Goodyear

Blimp. This airbase has been used by the Goodyear Blimp since January 1968. The project would replace a portion of the existing County golf course with new recreational and academic facilities that are similar to the existing recreational use of the site. Replacement of a golf course area with a tennis center, soccer fields, and a building providing academic resources to area youth would introduce additional sources of nighttime lighting as well as more buildings and structures on the project site. As such, the potential safety hazards associated with the project being located adjacent to the Goodyear Blimp Airship Base will be evaluated in the EIR prepared for the project.

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Potentially Significant Impact. The proposed project would convert the northeastern 87 acres of the existing County Victoria Golf Course to a sports center with tennis and soccer facilities as well as an academic resources building. The project site is located along two major thoroughfares: Martin Luther King Jr. Street to the north, and South Avalon Boulevard to the east. Across the street from the project site to the north are Victoria Park and Towne Avenue Elementary School. East of the project site is a residential community. Given that the proposed project is designed to serve youth within the community and that the project site is located along busy roadways, pedestrian safety for individuals accessing the site will be considered and evaluated in the EIR prepared for the project.

e) Would the project result in inadequate emergency access?

Less Than Significant Impact. Emergency access to the project site would be available via Martin Luther King Jr. Street to the north and South Avalon Boulevard to the east. Project construction and operational activities would occur entirely on the project site and would not obstruct any roadways or affect emergency access. Impacts would be less than significant, and this issue will not be evaluated in the EIR prepared for the project.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. The proposed project would convert the northeastern 87 acres of the existing Victoria Golf Course to a sports center with tennis and soccer facilities as well as an academic resources building. The project site is located along two major thoroughfares: Martin Luther King Jr. Street to the north, and South Avalon Boulevard to the east. According to the County of Los Angeles Bicycle Master Plan (2012), South

Avalon Boulevard includes dedicated Class II bicycle lanes in both the northbound and southbound directions. A Class I Bike Path is also located northwest of the project site, terminating at Martin Luther King Jr. Street. Additionally, public transportation is provided along South Avalon Boulevard via Long Beach Transit Line 1 and Los Angeles County Metropolitan Transportation Authority Line 205 and Line 246. The proposed project would not alter the Class II bicycle lanes along South Avalon Boulevard or the transit service provided by Long Beach Transit and the County Metropolitan Transportation Authority. As such, project implementation would not conflict with adopted policies, plans, or programs regarding alternative forms of transportation, and impacts would be less than significant. Therefore, this issue will not be further evaluated in the EIR prepared for the project.

2.17 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☒	☐	☐	☐

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Potentially Significant Impact. As the lead agency for this project, the County is initiating tribal consultation in compliance with Assembly Bill 52. Given the anticipated project construction activities, the potential for encountering resources is low. Nonetheless, consultations will be undertaken, and the outcome of the consultations will determine whether the project has the potential to cause a substantial adverse change to the significance of a tribal cultural resource. This issue area will be evaluated further in the EIR prepared for the project.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Potentially Significant Impact. As the lead agency for this project, the County is initiating tribal consultation in compliance with Assembly Bill 52. Given the anticipated project construction, the potential for encountering resources is low. Nonetheless, consultations will be undertaken, and the outcome of the consultations will determine whether the project has the potential to cause a substantial adverse change to the significance of a tribal cultural resource. This issue area will be evaluated further in the EIR prepared for the project.

2.18 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☒	☐	☐	☐

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact. Wastewater from the project site would drain to existing sewer connections and drainage facilities in the vicinity of the site. The potential for flows to exceed requirements from the Los Angeles Regional Water Quality Control Board will be evaluated in the EIR prepared for the project.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. Water would be provided to the project site via existing water conveyance pipelines, and wastewater from the project site would drain to existing sewer connections and drainage facilities in the vicinity of the site. The EIR prepared for the project will include an evaluation of whether the project could be supplied entirely by the existing water and wastewater treatment facilities.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. Stormwater from the project site would drain to existing drainage facilities in the vicinity of the site. The EIR prepared for the project will include an evaluation of whether flows could be accommodated by the existing facilities.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact. Water would be provided to the project site via existing water conveyance pipelines. The EIR prepared for the project will include an evaluation of whether adequate water supplies would be available to serve the project.

e) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Potentially Significant Impact. Wastewater would be conveyed from the project site for treatment off site at an existing wastewater treatment facility. The EIR prepared for the project will include an evaluation of whether adequate capacity exists to provide wastewater treatment for wastewater generated by the project.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Potentially Significant Impact. Solid waste would be conveyed from the project site and disposed at an existing landfill. The EIR prepared for the project will include an evaluation of whether adequate landfill capacity exists to provide solid waste disposal services for solid waste generated by the project.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Potentially Significant Impact. The EIR prepared for the project will include a discussion of how the proposed project would comply with all federal, state, and local statutes and regulations related to solid waste.

2.19 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. The existing Victoria Golf Course was constructed in 1966, and as such, the project has the potential to result in an adverse change to a potential historical resource. As the lead agency for this project, the County is initiating tribal consultation in compliance with Assembly Bill 52. The outcome of the consultations will determine whether the project has the potential to cause a substantial adverse change to the significance of a tribal cultural resource. As such, these two issues will be evaluated in the EIR prepared for the proposed project.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Potentially Significant Impact. The proposed project may have impacts that have been identified in the Initial Study as individually limited but that may be cumulatively considerable, depending on other current or probable future projects in the vicinity. The EIR prepared for the project will evaluate potential project-related cumulative impacts, including the neighboring project proposed by Plenitude.

As discussed in Section 2.3, Air Quality, the proposed project could contribute to a cumulatively considerable net increase in criteria air pollutants for which the SCAB has been designated non-attainment. The production of GHG emissions related to project construction may result in cumulative impacts that may contribute to global change. Cumulative traffic impacts could also occur during project construction. These impacts are potentially significant and will be further discussed in the EIR prepared for the proposed project.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. As discussed previously, environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, may occur from implementation of the proposed project. Further evaluation of potentially significant impacts relative to aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems will be conducted in the EIR prepared for the proposed project.

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3.2 List of Preparers

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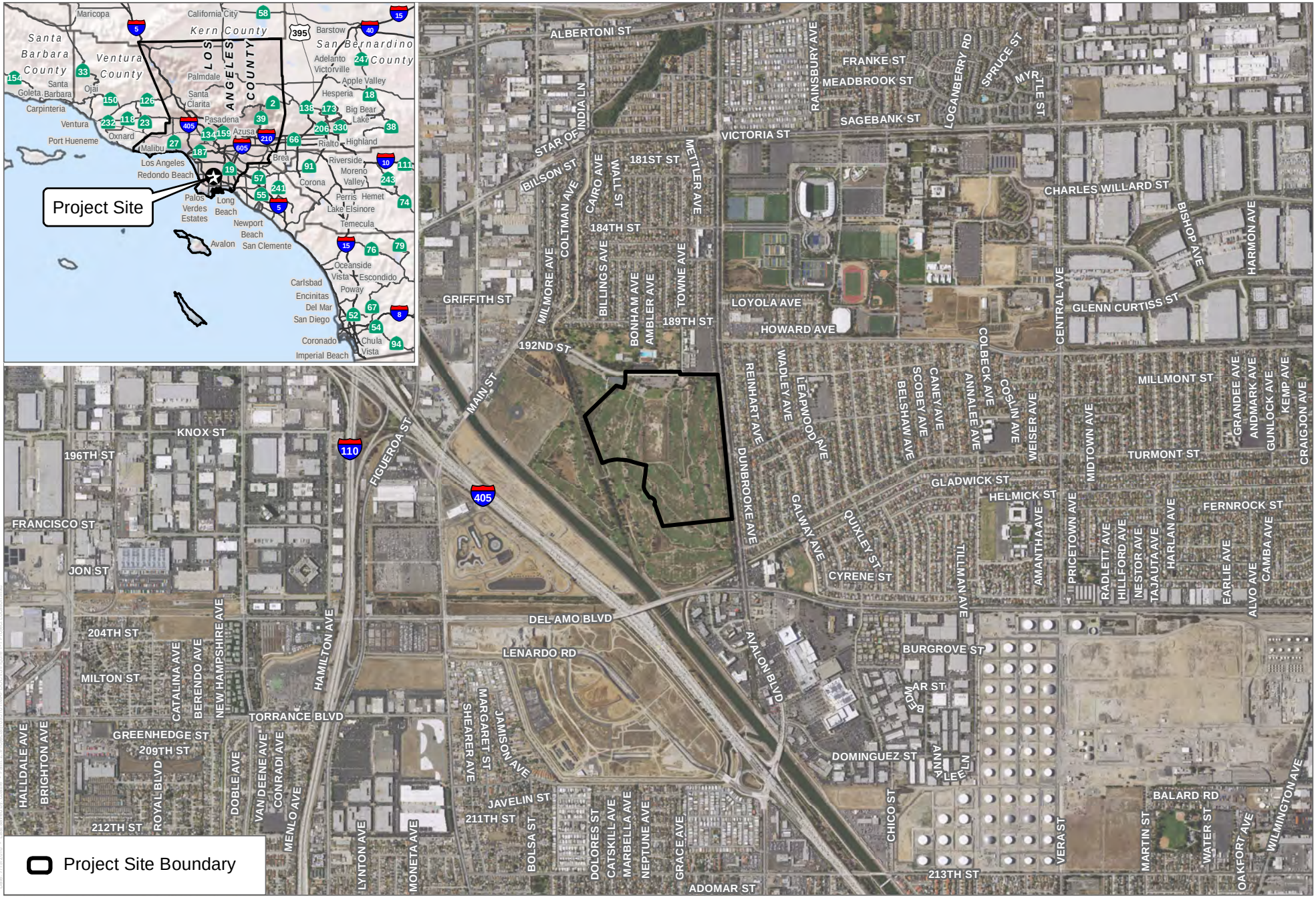

FIGURE 1-1

Project Location

Carol Kimmelman Sports and Academic Campus

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LEGEND

TENNIS CENTER

1. WELCOME CENTER
2. LEARNING CENTER
3. ENTRY PLAZA
4. BASKETBALL COURTS
5. COMPETITION VENUE (12 HARD COURTS)
6. PLAYER DEVELOPMENT / COLLEGIATE CENTER
7. TOURNAMENT/ LEAGUE ADMINISTRATION BUILDING
8. 100M SPRINT TRACK
9. 4 CLAY COURTS
10. MONUMENT ENTRY/ SIGN
11. CENTRAL PLAZA
12. 8 36 FT COURTS
13. 4 60 FT COURTS (+4 FUTURE COURTS)
14. TRAINING TURF
15. TENNIS CENTER COURTS (24 HARD COURTS)
16. FUTURE COVERED COURTS (6 COURTS)
17. MAINTENANCE BUILDING
18. OUTDOOR EXERCISE COURSE
19. VISITOR PARKING
20. BUS PARKING
21. EMPLOYEE PARKING
22. OVERFLOW PARKING

SOCCER CENTER

23. 2 NATURAL GRASS MULTIPURPOSE FIELDS
24. 6 FULL SIZE NATURAL GRASS SOCCER FIELDS
25. 2 FULL SIZE ARTIFICIAL TURF SOCCER FIELDS
26. SUPPORT BUIDLING
27. SOCCER PARKING
28. OVERFLOW PARKING

SOURCE: MEIS, 2018

FIGURE 1-2

Site Plan

Carol Kimmelman Sports and Academic Campus

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SOURCE: MEIS, 2017

FIGURE 2-1

Tennis Complex

Carol Kimmelman Sports and Academic Campus

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SOURCE: MEIS, 2017

FIGURE 2-2

Soccer Fields

Carol Kimmelman Sports and Academic Campus

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Carol Kimmelman Sports and Academic Campus Project EIR - Scoping Meeting
August 14, 2018

County of Los Angeles

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1.	Jacqui Stewart	Resident	7860 E. Cashdan St	Carson, CA 90746	jacquistein2@gmail	☒	☐
2.	Arthur Williams	Resident	701 Loyola Ave.	Carson, CA 90746	atwill29200@msn.com	☒	☐
3.	Sandra Lewis	Resident	742 E. Turmont St	Carson, CA 90746		☐	☒
4.	Darien Hawkins	Resident	19102 Leeapwood Ave	Carson, CA 90746	darienh@sbcglobal.net	☐	☐
5.	David Jeffers	Resident	17524 Rainsbury Ave	Carson, 90746		☒	☐
6.	Mayra Coreas	Resident	18702 Wall Street	Carson, 90746	coreas_mayra@yahoo.com	☒	☐
7.	Lesley + Karla Thompson	Resident	659 Loyola Ave	Carson, CA 90746	let50@sbcglobal.net	☑	☐
8.	Tony & Alice Harris	Resident	19416 Galway Ave.	Carson, CA 90746	clarkaclarkl@aol.com	☒	☐
9.	Harold Williams	"	20113 Belshaw Ave	" "	harldwms@gmail.com	☒	☐
10.	Jr Sumpter	Res.	1542 E Abbott St	Carson 90746	jrsumpter@yahoo	☐	☐
11.	V. Bereal	Resident	18802 Grambling Pl.	Carson 90746	vbereal@yahoo	☑	☐
12.	M.A. DuPree	Resident	2009 Reinhart Ave	Carson, 90746		☐	☐
13.	Nathaniel Brown	Resident	19402 Belshaw Ave	Carson 90746	Natebrown1940@yahoo.com	☐	☐
14.	Dennis Peterson	"	943 W. Carson St Torrance 90502		dpeteca@hotmail.com	☒	☐

*Note: Official notices will be sent via United States Postal Service.

Carol Kimmelman Sports and Academic Campus Project EIR - Scoping Meeting
August 14, 2018

County of Los Angeles

	Name	Affiliation	Address	City, State, Zip Code	Email*	Add me to the mailing list?	
15.	EUGENE BRYANT	VSMGC	319 E. 158 ST	GARDENA CA 90248		Yes: ☐	No: ☒
16.	Lisa Bullock	neighbor	19621 Dunbrooke	Carson 90746	lisaddejonna@sbcglobal.net	Yes: ☒	No: ☐
17.	Idris Al-[illegible]	city of Carson.				Yes: ☐	No: ☐
18.	Lee Cornelius	Resident	738 Turmont St	CARSON		Yes: ☐	No: ☐
19.	MYRNA Cornelius	Resident	738 Turmont St	CARSON		Yes: ☐	No: ☐
20.	Raymond Lampke	Resident	19921 Dunbrooke Ave	Carson		Yes: ☐	No: ☐
21.						Yes: ☐	No: ☐
22.						Yes: ☐	No: ☐
23.						Yes: ☐	No: ☐
24.						Yes: ☐	No: ☐
25.						Yes: ☐	No: ☐
26.						Yes: ☐	No: ☐
27.						Yes: ☐	No: ☐
28.						Yes: ☐	No: ☐

**Note: Official notices will be sent via United States Postal Service.*

Carol Kimmelman Sports and Academic Campus Project EIR - Scoping Meeting
August 14, 2018

County of Los Angeles

	Name	Affiliation	Address	City, State, Zip Code	Email*	Add me to the mailing list?	
29.	CORRNEL TODD	VICTORIA MEN CLUB	1908 E PINE ST	Compton Cal 9022	C TODD FAMILY@_Com	Yes: ☑	No: ☐
30.	GIL SMITH	FORMER MAYOR	18802 PEPPERDINE DR.	CARSON, CAL 90746		Yes: ☒	No: ☐
31.	Vince Goshi	Victoria Ge	28610 Mt. Rushmore Rd Rancho Palos Verdes 90275	RPV, CA 90275	vincegoshi@cox.net	Yes: ☐	No: ☐
32.	DEREK MOODY	RESIDENT	727 E Holborn Drive	Carson, CA 90746	MrDerek88@gmail.com	Yes: ☑	No: ☐
33.	Daisy Valdez	Resident	18703 Bonham Ave.	Carson, CA 90746		Yes: ☐	No: ☐
34.	SHIRLEY Smith	Resident	18802 Pepperdine Dr	Carson 90746	ssmith@LABiomed.org	Yes: ☐	No: ☐
35.						Yes: ☐	No: ☐
36.						Yes: ☐	No: ☐
37.						Yes: ☐	No: ☐
38.						Yes: ☐	No: ☐
39.						Yes: ☐	No: ☐
40.						Yes: ☐	No: ☐
41.						Yes: ☐	No: ☐
42.						Yes: ☐	No: ☐

*Note: Official notices will be sent via United States Postal Service.

Carol Kimmelman Sports and Academic Campus Project EIR - Scoping Meeting
August 14, 2018

County of Los Angeles

	Name	Affiliation	Address	City, State, Zip Code	Email*	Add me to the mailing list?	
43.	Charlotte Brimmer	Homeowner Association President		Carson	ppls100@aol.com	Yes: ☐	No: ☐
44.	McKina Alexander				malexand@carson.ca.us	Yes: ☐	No: ☐
45.						Yes: ☐	No: ☐
46.						Yes: ☐	No: ☐
47.						Yes: ☐	No: ☐
48.						Yes: ☐	No: ☐
49.						Yes: ☐	No: ☐
50.						Yes: ☐	No: ☐
51.						Yes: ☐	No: ☐
52.						Yes: ☐	No: ☐
53.						Yes: ☐	No: ☐
54.						Yes: ☐	No: ☐
55.						Yes: ☐	No: ☐
56.						Yes: ☐	No: ☐

**Note: Official notices will be sent via United States Postal Service.*

Carol Kimmelman Sports and Academic Campus Project EIR - Scoping Meeting
August 14, 2018

County of Los Angeles

	Name	Affiliation	Address	City, State, Zip Code	Email*	Add me to the mailing list?	
57.	Karen Vernon		18806 S. Towne Ave	Carson, CA 90746		Yes: ☑	No: ☐
58.	Andrea Cruz		503 E. 109th St	Carson CA 90746		Yes: ☐	No: ☐
59.	CATHY HAWKINS		18818 TOWNE AVE	CARSON 90746		Yes: ☑	No: ☐
60.	Lori Stewart		18702 Milmore Ave	Carson 90746	Lori.Stewart@yahoo.com	Yes: ☑	No: ☐
61.	Manraj Bhatia		701 E Carson St	Carson, Ca-90745		Yes: ☑	No: ☐
62.	Ron Fisher					Yes: ☐	No: ☐
63.	Maria Coreas	Res.	18702 Wall St	Carson CA 90746	coreas_maria@yahoo.com	Yes: ☑	No: ☐
64.	Eusebio Almendy		330189 ST	CARSON	CALIFO	Yes: ☐	No: ☐
65.						Yes: ☐	No: ☐
66.						Yes: ☐	No: ☐
67.						Yes: ☐	No: ☐
68.						Yes: ☐	No: ☐
69.						Yes: ☐	No: ☐
70.						Yes: ☐	No: ☐

*Note: Official notices will be sent via United States Postal Service.

STATE OF CALIFORNIA Edmund G. Brown Jr., Governor
NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710

August 8, 2018

Ryan Kristan
Los Angeles County
500 West Temple Street
Los Angeles, CA 90012

Also sent via e-mail: rkristan@dpw.lacounty.gov

RE: SCH# 2018071074, Carol Kimmelman Sports and Academic Campus Project, City of Carson; Los Angeles County, California

Dear Mr. Kristan:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for Draft Environmental Impact Report for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd. (a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a **separate category of cultural resources**, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code § 21084.2). Please reference California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends **lead agencies consult with all California Native American tribes** that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws**.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
    - **a.** A brief description of the project.
    - **b.** The lead agency contact information.
    - **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
    - **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
    - **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
    - **a.** Alternatives to the project**.**
    - **b.** Recommended mitigation measures**.**
    - **c.** Significant effects**.** (Pub. Resources Code § 21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
    - **a.** Type of environmental review necessary.
    - **b.** Significance of the tribal cultural resources.
    - **c.** Significance of the project's impacts on tribal cultural resources.
    - **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
    - **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
    - **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

    This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have been already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
- **a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
- **b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- **a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- **b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- **c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, M.A., Ph.D.
Associate Governmental Program Analyst
(916) 373-3714

cc: State Clearinghouse

Nicole Cobleigh

From: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Sent: Tuesday, September 4, 2018 8:34 AM
To: Derek.Galey@lw.com; Nicole Cobleigh
Subject: FW: Carol Kimmelman Sports and Academic Campus - Caltrans' comments
Attachments: Carol Kimmelman Campus - CT comments.pdf

Derek and Nicole,

Comments on Kimmelman project attached.

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
Office (626) 300-3271
Cell (213) 840-7004

CONFIDENTIALITY NOTICE: This email message, including any attachments, from the Department of Public Works is intended for the official and confidential use of the recipients to whom it is addressed. It contains information that may be confidential, privileged, attorney work product, or otherwise exempted from disclosure under applicable law. If you have received this message in error, be advised that any review, disclosure, use, dissemination, distribution, or reproduction of this message or its contents is strictly prohibited. Please notify the sender of this email immediately by reply email that you have received this message in error, and immediately destroy this message, including any attachments. Thank you in advance for your cooperation.

From: Sheikh, Shabnam@DOT <Shabnam.Sheikh@dot.ca.gov>
Sent: Thursday, August 30, 2018 10:02 AM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Cc: state.clearinghouse@opr.ca.gov
Subject: Carol Kimmelman Sports and Academic Campus - Caltrans' comments

Good morning Mr. Kristan,

Attached, please find Caltrans' comments on the NOP for Carol Kimmelman Sports and Academic Campus (SCH#2018071074). The original document has been sent to the Lead Agency on 8/30/18.

Thanks,
Shabnam Sheikh
District 7 | Division of Planning - IGR
California Department of Transportation

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-8391
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

August 30, 2018

Mr. Ryan Kristan
County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803

RE: Carol Kimmelman Sports and Academic Campus
NOP of Draft Environmental Impact Report
GTS # 07-LA-2018-01803
SCH # 2018071074
Vic. LA: 405, 110

Dear Mr. Kristan:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project involves the development of the Carol Kimmelman Sports and Academic Campus including a tennis center and soccer center for underserved youth as well as programs for adults.

After reviewing the Notice of Preparation, Caltrans concurs with the initial study determination that the proposed project may have significant environmental impacts and traffic analysis is requested for Route 110.

1. The Traffic Impact Study Report to be prepared should include queues analysis and recommend mitigations at the following locations:
   - NB-110 and SB-110 Off-ramp to Del Amo Blvd/Hamilton Ave.
   - SB-110 Off-ramp to Carson St.
   - NB-110 Off-ramp to 220th St./Figueroa St.
   - SB-110 Off-ramp to 190th St.

2. Please consider appropriate multimodal mitigation measures for this project. Caltrans suggest improving safety for bicyclists, pedestrians, transit users, and motorists by upgrading and installing ADA curb ramps at the most feasible locations near on and off ramps in the vicinity of the project.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that project needs to be designed to discharge clean run-off water. If you have any questions, please feel free to contact the project coordinator, Shabnam Sheikh, shabnam.sheikh@dot.ca.gov, and refer to GTS #07-LA-2018-01803.

Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-8391
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

RECEIVED
SEP 06 2018
PROJECT MANAGEMENT DIVISION II
DEPARTMENT OF PUBLIC WORKS

August 30, 2018

Mr. Ryan Kristan
County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803

RE: Carol Kimmelman Sports and Academic Campus
NOP of Draft Environmental Impact Report
GTS # 07-LA-2018-01803
SCH # 2018071074
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Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

South Coast
Air Quality Management District
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PROJECT MANAGEMENT DIVISION II
DEPARTMENT OF PUBLIC WORKS

August 22, 2018

SENT VIA USPS AND E-MAIL:
rkristan@dpw.lacounty.gov
Ryan Kristan
County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Avenue, 5th Floor
Alhambra, California 91803

Notice of Preparation of a Draft Environmental Impact Report for The Carol Kimmelman Center, LLC Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address shown in the letterhead. **In addition, please send with the Draft EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files[1]. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, SCAQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD staff recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analyses. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). The SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board on March 23, 2017.

[1] Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. The 2016 AQMP is available on SCAQMD's website at: http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan.

SCAQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and the SCAQMD to reduce community exposure to source-specific and cumulative air pollution impacts, the SCAQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. SCAQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. This Guidance Document is available on SCAQMD's website at: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: http://www.arb.ca.gov/ch/handbook.pdf. Guidance[2] on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

The SCAQMD has also developed both regional and localized significance thresholds. SCAQMD staff requests that the Lead Agency compare the emission results to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the Draft EIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the Draft EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers),

[2] In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: https://www.arb.ca.gov/ch/landuse.htm.

area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, for phased projects where there will be an overlap between construction and operation, the air quality impacts from the overlap should be combined and compared to SCAQMD's regional air quality CEQA operational thresholds to determine significance.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis.

Mitigation Measures

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the Proposed Project, including:

- Chapter 11- Mitigating the Impact of a Project, of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages available here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- SCAG's MMRP for the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy available here: http://scagrtpscs.net/Documents/2016/peir/final/2016fPEIR_ExhibitB_MMRP.pdf
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Alternatives

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Draft EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

In the event that the Proposed Project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the Proposed Project. For more information on permits, please visit

SCAQMD webpage at: http://www.aqmd.gov/home/permits. Questions on permits can be directed to SCAQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project air quality and health risk impacts are accurately evaluated and mitigated where feasible. Please contact Robert Dalbeck, Assistant Air Quality Specialist, at rdalbeck@aqmd.gov, if you have any questions regarding these comments.

Sincerely,

Daniel Garcia

Daniel Garcia
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

DG/RD
RVC180801-15
Control Number

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GRACE ROBINSON HYDE
Chief Engineer and General Manager

August 20, 2018

Ref. Doc. No.: 4669704

RECEIVED
AUG 22 2018
PROJECT MANAGEMENT DIVISION II
DEPARTMENT OF PUBLIC WORKS

Mr. Ryan Kristan
Department of Public Works
Project Management Division II
County of Los Angeles
900 South Freemont Avenue
5th Floor
Alhambra, CA 91803

Dear Mr. Kristan:

NOP Response for
The Carol Kimmelman Sports and Academic Campus

The Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report (NOP) for the subject project on August 1, 2018. The proposed project is located within the jurisdictional boundaries of District No. 8. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Del Amo Trunk Sewer, located in Avalon Boulevard at Del Amo Boulevard. The Districts' 24-inch diameter trunk sewer has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a capacity of 400 mgd and currently produces an average flow of 2015 mgd.

3. In order to estimate the volume of wastewater the project will generate, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link for a copy of the Districts' average wastewater generation factors.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org,

Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. In determining the impact to the Sewerage System and applicable connection fees, the Districts' Chief Engineer and General Manager will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Los Angeles Unified School District

Office of Environmental Health and Safety

AUSTIN BEUTNER
Superintendent of Schools

DIANE PAPPAS
Chief Executive Officer, District Operations & Digital Innovations

CARLOS A. TORRES
Acting Director, Environmental Health and Safety

8/22/18

Ryan Kristan
County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Ave, 5th Floor
Alhambra, CA 91803

SUBJECT: PROJECT NAME: Carol Kimmelman Sports and Academic Campus
PROJECT LOCATION: 340 Martin Luther King Jr. Street, Carson, CA 90746

Presented below are comments submitted on behalf of the Los Angeles Unified School District (LAUSD) regarding the Notice of Preparation for the subject project. Due to the fact that Towne Avenue Elementary School is located immediately north of the proposed project site, LAUSD is concerned about the potential negative impacts of the project to our students, staff and parents traveling to and from the referenced campus.

Based on the extent/location of the proposed development, it is our opinion that significant environmental impacts on the surrounding community (air quality, noise, traffic, pedestrian safety, etc.) will occur. Since the project will have a significant impact on LAUSD schools, mitigation measures designed to help reduce or eliminate such impacts are included in this response.

Air Quality
District students and school staff should be considered sensitive receptors to air pollution impacts. Construction activities for the proposed project would result in short term impacts on ambient air quality in the area resulting from equipment emissions and fugitive dust. To ensure that effective mitigation is applied to reduce construction air pollutant impacts on the school, we ask that the following language be included as a mitigation measure for air quality impacts:

- If the proposed mitigation measures do not reduce air quality impacts to a level of insignificance, the project applicant shall develop new and appropriate measures to effectively mitigate construction related air emissions at the affected school. Provisions shall be made to allow the school and or designated representative(s) to notify the project applicant when such measures are warranted.

Noise
Noise created by construction activities may affect the school in proximity to the proposed project site. These construction activities include grading, earth moving, hauling, and use of heavy equipment. The California Environmental Quality Act requires that such impacts be quantified, and eliminated or reduced to a level of insignificance.

LAUSD established maximum allowable noise levels to protect students and staff from noise impacts generated in terms of Leq. These standards were established based on regulations set forth by the California Department of Transportation and the City of Los Angeles. LAUSD's exterior noise standard is 67 dBA Leq and the interior noise standard is 45 dBA Leq. A noise level increase of 3 dBA or more over ambient noise levels is considered significant for existing schools and would require mitigation to achieve levels

within 2 dBA of pre-project ambient level. To ensure that effective mitigations are employed to reduce construction related noise impacts on District sites, we ask that the following language be included in the mitigation measures for noise impacts:

- If the proposed mitigation measures do not reduce noise impacts to a level of insignificance, the project applicant shall develop new and appropriate measures to effectively mitigate construction related noise at the affected school. Provisions shall be made to allow the school and or designated representative(s) to notify the project applicant when such measures are warranted.

Traffic/Transportation

LAUSD's Transportation Branch **must be contacted** at (213) 580-2950 regarding the potential impact upon existing school bus routes. The Project Manager or designee will have to notify the LAUSD Transportation Branch of the expected start and ending dates for various portions of the project that may affect traffic within nearby school areas. To ensure that effective mitigations are employed to reduce construction and operation related transportation impacts on District sites, we ask that the following language be included in the mitigation measures for traffic impacts:

- School buses must have unrestricted access to schools.

- During the construction phase, truck traffic and construction vehicles may not cause traffic delays for our transported students.

- During and after construction changed traffic patterns, lane adjustment, traffic light patterns, and altered bus stops may not affect school buses' on-time performance and passenger safety.

- Construction trucks and other vehicles are required to stop when encountering school buses using red-flashing-lights must-stop-indicators per the California Vehicle Code.

- Contractors must install and maintain appropriate traffic controls (signs and signals) to ensure vehicular safety.

- Contractors must maintain ongoing communication with LAUSD school administrators, providing sufficient notice to forewarn children and parents when existing vehicle routes to school may be impacted.

- Parents dropping off their children must have access to the passenger loading areas.

Pedestrian Safety

Construction activities that include street closures, the presence of heavy equipment and increased truck trips to haul materials on and off the project site can lead to safety hazards for people walking in the vicinity of the construction site. To ensure that effective mitigations are employed to reduce construction and operation related pedestrian safety impacts on District sites, we ask that the following language be included in the mitigation measures for pedestrian safety impacts:

- Contractors must maintain ongoing communication with LAUSD school administrators, providing sufficient notice to forewarn children and parents when existing pedestrian routes to school may be impacted.

- Contractors must maintain safe and convenient pedestrian routes to all nearby schools. The District will provide School Pedestrian Route Maps upon your request.

- Contractors must install and maintain appropriate traffic controls (signs and signals) to ensure pedestrian and vehicular safety.

- Haul routes are not to pass by ***any*** school, except when school is ***not*** in session.

- No staging or parking of construction-related vehicles, including worker-transport vehicles, will occur on or adjacent to a school property.

- Funding for crossing guards at the contractor's expense is required when safety of children may be compromised by construction-related activities at impacted school crossings.

- Barriers and/or fencing must be installed to secure construction equipment and to minimize trespassing, vandalism, short-cut attractions, and attractive nuisances.

- Contractors are required to provide security patrols (at their expense) to minimize trespassing, vandalism, and short-cut attractions.

The District's charge is to protect the health and safety of students and staff, and the integrity of the learning environment. The comments presented above identify potential environmental impacts related to the proposed project that must be addressed to ensure the welfare of the students attending Towne Avenue Elementary School, their teachers and the staff, as well as to assuage the concerns of the parents of these students. Therefore, the measures set forth in these comments should be adopted as conditions of project approval to offset unmitigated impacts on the affected school students and staff.

Thank you for your attention to this matter. If you need additional information please contact me at (213) 241-4674.

Regards,

Cinah Daqiq
Environmental Specialist/Research Associate

Nicole Cobleigh

From: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Sent: Tuesday, September 4, 2018 8:08 AM
To: Derek.Galey@lw.com; Nicole Cobleigh
Subject: FW: Carol Kimmelman Sports and Academic Campus Project: Initial Study Comments
Attachments: KRISTAN 8-31-18_001.pdf

Derek and Nicole,

Please see attached.

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
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From: Danny Aleshire <danny.aleshire@awattorneys.com>
Sent: Friday, August 31, 2018 4:53 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Cc: Sunny Soltani <ssoltani@awattorneys.com>; Danny Aleshire <danny.aleshire@awattorneys.com>; snaaseh@carson.ca.us; 'Kenneth C. Farfsing' <kfarfsing@carson.ca.us>; 'John Raymond' <jraymond@carson.ca.us>; Danielle Griffith <DGriffith@esassoc.com>; Heidi Rous <HRous@esassoc.com>
Subject: Carol Kimmelman Sports and Academic Campus Project: Initial Study Comments

Hi Ryan,

Please see attached for a comment letter sent on behalf of the City of Carson regarding the Initial Study and NOP that were released last month for the Kimmelman Project on the Victoria Golf Course Site.

Best Regards,

Danny Aleshire | Associate
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August 31, 2018

VIA U.S. MAIL AND E-MAIL

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Re: **Carol Kimmelman Sports and Academic Campus Project: Initial Study Comments**

Dear Mr. Kristan:

This firm represents the City of Carson ("City") as its City Attorney. On behalf of the City, we thank you for the opportunity to comment on the Initial Study issued by the County of Los Angeles ("County") for the above-referenced project (the "Project"), located at 340 Martin Luther King, Jr. Street, City of Carson, CA ("Project Site"). As the Project is located within the City's jurisdiction, it is a responsible agency under CEQA (Public Resources Code § 21000 *et seq.*, "CEQA") and as outlined below, since this is a private project initiated and carried out by The Carol Kimmelman Center, LLC ("Kimmelman"), the City will have discretionary authority over the permits and entitlements required for the Project. Without waiving the legal position[1] of our client that the City must be designated as the "lead agency" for the purposes of environmental review under CEQA for the Project, we write to provide comments on your legally deficient Notice of Preparation ("NOP") and Initial Study for the Project, each dated July 31, 2018.

While the City understands that there are a number of potential benefits associated with the Project, the City remains concerned that substantial impacts to the citizens of Carson posed by the Project are not being adequately presented nor analyzed under the Initial Study and will be inappropriately addressed in the Draft EIR for the Project. Similarly, those impacts are not targeted for potential mitigation or improvements that could reduce the effects endured by the community as a result of the Project. As such, the City has the following comments and questions in response to the NOP and Initial Study:

[1] The City hereby incorporates its legal and factual positions as set forth in letters dated May 11, 2018 and June 27, 2018 to the County ("Letters") into this comment letter.

I. GENERAL PROJECT COMMENTS

A. Improper "Piecemealing" of the Redevelopment of the Victoria Golf Course Site

The existing Victoria Golf Course site ("VGC Site") consists of approximately 187 acres, with the development of a single use (a golf course) and is proposed to be redeveloped with the Project as well as the project known as The Creek at Dominguez Hills Project proposed by Plenitude Holdings (the "Plenitude Project") for which an Initial Study was separately released earlier this week. The environmental impacts imposed by the Project cannot be properly analyzed or assessed without reference to, and consideration of, the concurrent development of Plenitude Project and the environmental impacts that may result from the redevelopment of the entirety of the VGC Site, rather than separate analysis of each of the project. Such separate analysis is expressly prohibited under the CEQA Guidelines, as CEQA forbids "piecemealing" projects. Pursuant to CEQA, the whole of the entire project must be analyzed and those environmental considerations related to project(s) broken down into little projects, thus reducing or minimizing the potential impacts to the environment through "piecemeal" is prohibited. Potential growth impacts, such as new development projects, cannot be deferred to be analyzed in a piecemeal fashion at a later time. Rather, "the need for regional environmental consideration [must be made] at the earliest stage of a planned development before it gains irreversible momentum." (*Bozung v. Local Agency Formation Commission of Ventura County* (1975) 13 Cal. 3d 263, 284, fn. 28.) Moreover, CEQA Guidelines 15378(c) and (d) provide:

"(c) The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term 'project' does not mean each separate governmental approval.

(d) Where the lead agency could describe the project as either the adoption of a particular regulation under subdivision (a)(1) or as a development proposal which will be subject to several governmental approvals under subdivisions (a)(2) or (a)(3), the lead agency shall describe the project as the development proposal for the purpose of environmental analysis."

The Project and the Plentitude Project together will collectively result in the concurrent redevelopment of the VGC Site and as a result, must be analyzed simultaneously under one EIR. An agency cannot treat one integrated large project as a succession of smaller projects to avoid analyzing the environmental impacts of the whole project. (*See*, *CASDBA v. County of Inyo* (1985) 172 Cal. App. 3d 151, 165-166 [two separate "packages" of entitlements for one project, each analyzed in a separate Negative Declaration, improper].) Instead, the County is "piecemealing" its environmental analysis in a manner that makes it incapable of appropriate analysis of the potential for environmental impacts. Thus, both projects must be analyzed together, pursuant to CEQA, not as separate CEQA documents.

B. Land Use and Planning Impacts

We are perplexed by the County's determination that there is no potential for any impacts under the Land Use and Planning environmental factors requiring study under CEQA and that such factors do not need to be addressed (and do not require any further study) under the Draft EIR for the Project. This is patently untrue for a number of reasons. First, the Project's proposed uses are inconsistent with the City's General Plan Land Use Element and zoning designation for the Project Site, which is Open Space ("OS"). The OS designation allows for outdoor recreational uses such as those proposed by the Project, however, if the fields, tennis courts, and other facilities and buildings are privately-owned or contain educational uses not incidental to outdoor recreation, they will require discretionary approval of a Conditional Use Permit (CUP) from the City. Moreover, under the City's Municipal Code, the Project will require a CUP for developing on a former landfill (Carson Municipal Code ("CMC"), Section 9151.12) and Design Overlay Review (CMC, Section 9172.23). Second, the Project Site is not classified under the County's General Plan Land Use Map or Zoning Map for any particular use because it is located within an incorporated area, in the City's jurisdiction. Therefore, it cannot be found to be either consistent or inconsistent with the County's land use plan for the Project Site. While it is referenced as a property owned by the County as a park/golf/open space site under the Community, Neighborhood and Pocket Park Service Radius Map (Figure 10.3 of the County's General Plan), such areas are required to be used for open space uses. Thus, the indoor private educational facilities and administrative center proposed by the Project would be inconsistent with the open space uses allowed on the Project Site. Finally, on page 1 of the Initial Study, the Project Site's General Plan land use designation is listed as Recreational Open Space under the City's General Plan and its Zoning classification is listed as being designated OS-Organic Refuse Landfill under the CMC, however, the narrative analysis under the Initial Study (rationalizing the County's conclusion that no further analysis under the Land Use and Planning factors under CEQA) fails to make reference to the City's General Plan land use and zoning classifications for the Project Site nor analyze the Project's consistency with the City's land use plans and policies pertaining to the Project Site.

The County has previously indicated to the City, in its responses to our Letters, that its position is that the Project is exempt from the City's local building and zoning regulations based on the fact that the Project Site is owned by the County (which is leased to Kimmelman), and that the County is entitled to intergovemental immunity from the City's building and zoning regulations. However, since the Project is a private, rather than a public project, the doctrine of intergovernmental immunity is inapplicable. Under the California Code of Regulations, Section 15377, "[a] 'private project' means a project which will be carried out by a person other than a governmental agency, but the project will need a discretionary approval from one or more governmental agencies..." Clearly, this Project falls within this definition as it is initiated by a private, non-governmental entity, and will be carried out, financed, and developed by a private entity, and the Project improvements themselves, including all structures and facilities developed for the Project will be presumably owned by Kimmelman, not the County. The County's role is

simply as the underlying fee title owner, with no further involvement. Moreover, the underlying purpose of the Project is for private development, as it will be privately operated (by the U.S. Tennis Association ("USTA"), the Tiger Woods Foundation and potentially other private associations/operators) primarily for the benefit of their members and participants. The County is therefore inappropriately seeking to transfer its governmental immunity under Section 53090 of the California Government Code to Kimmelman in order to enable the Project to be free of the City's building and zoning regulations. Such contravention of the City's police powers is inappropriate under state law as set forth in various California Appellate Court cases, including *Board of Trustees v. City of Los Angeles* (1975) 49 Cal. App. 3d 45 (*Board of Trustees*)[2], and *Attard v. Board of Supervisors of Contra Costa County* (2017) 14 Cal. App. 5th 1066, *Bame v. City of Del Mar* (2001) 14 Cal. App. 4th 1346, and also in 85 Op. Att'y Gen. 207 (1985), and 4 Rathkopf, The Law of Zoning and Planning, Section 53.04.

As a result, development of the Project, even if located on County-owned land, falls squarely within Carson's land use and permitting authority. Therefore, the Draft EIR must study the Project's consistency with the City's General Plan, Municipal Code, and its other policies and regulations applicable to the Project and the Project Site.

The City is vitally interested, among other issues identified in this comment letter, in making certain the EIR fully and adequately assesses the environmental impacts posed by the Project, including the potential to result in numerous conflicts and inconsistencies with the City's land use and zoning plans and policies, which ensure the health, safety, and welfare of its residents.

II. SPECIFIC PROJECT COMMENTS[3]

Project Description

1. The Project Description requires substantial revision to provide greater detail and definition in order to allow for sufficient analysis of the potential for environmental impacts of the Project. For example, the Project Description must explain how the courts, fields, and facilities will be used, operated (and by whom, including the USTA, Tiger Woods Foundation and others), and programed (by the USTA, the Tiger Woods Foundation and others). In addition, the type of events, number of events, and duration

[2] In this case, the court held that a private party's operation of a circus is not insulated from local regulation merely because the circus will be conducted on property leased from a state university. (*Board of Trustees*, at pp. 49-50.)

[3] Please note that the list of comments and questions in this section is intended to include the typical items we expect to see, and are generally addressed, in an EIR along with comments and questions for the County regarding the Project for the County to address with City staff in upcoming meetings regarding the Project and the Plenitude Project.

of events should be explained in detail. If any regional tennis or soccer or other events that will draw large crowds are expected, please describe and analyze the public safety and public works impacts they may impose on the City and what form of reimbursement or compensation will be provided to the City for such event costs. Separately, the Sports Facilities Advisory's ("SFA") analysis and recommendations should be utilized to finalize the Project Description.

2. Please provide the anticipated hours of operation for the proposed Project. Specifically, it would be helpful to understand the planned operation of each component of the Project, such as the hours and days of operation of the learning center, the tennis facility, and the fields.

3. The Project Description states the fields be lighted in the evening and night. How late would the lights be allowed on during the week and weekends? The Draft EIR must study the potential for light spillover into surrounding neighborhoods and potential environmental impacts posed by such night-lighting.

4. Who are the intended and allowed users of the various Project components? Will it be open to the public? Will various elements of the Project be reserved for private leagues or members only? We understand that the Project will not be generally open to the public. Will there be any fees imposed on public users of the Project Site and to what extent will fees be imposed on the public for use of the various facilities? Please describe the programming for the Project and its various facilities in detail.

5. All potential permits and approvals that will be required for this regionally significant Project need to be identified as a part of the Project Description. The Project's construction traffic and traffic from long term operations will significantly impact City streets. Please describe the City approvals that will be required for roadway and intersection improvements and/or road and utility encroachments.

6. Please explain how the entitlement approvals for both this Project and the Plenitude Project are expected to be processed and how they will ensure their compatibility with each other and their respective connections to existing and future City infrastructure such as parks, trial, bikeways, etc.

7. Please provide detail on the expected average and maximum daily users of the Project Site and the annual number of expected visitors to the Project. Please provide the maximum capacity the Project Site will accommodate. For example, will there be any regional tennis or soccer events that would draw large crowds? The City is already experiencing public safety and public works impacts from the operations at the Stub Hub Center. Does the County propose to reimburse the City for these special event costs or will the proposed Project costs be borne entirely by the County?

8. The discussion of the surrounding land uses must be further expanded and explained. What is the plan for the remaining portion of the VGC Site? Please provide specific information.

9. Please provide a list of street improvements the proposed Project would implement in the area surrounding the Project Site. The street improvements planned for the development must be identified and analyzed (i.e., widening on Martin Luther King Jr. Street ("MLK"), need for intersection and signal modifications).

10. Please advise if there will be security / security team on-site. Please prepare a security plan for the proposed Project, including special event plan and security impacts for the surrounding vicinity.

11. Please advise what changes will be required for the existing transmission towers on-site to accommodate the Project, or how they will be incorporated within the Project.

12. Please provide a description of emergency access and evacuation routes to the Project Site and emergency / first responder access internal to the Project Site.

13. Please describe existing and proposed water use on the Project Site.

14. Please provide existing and proposed drainage on the Project Site, including integration with the City and County TMDL's as part of the watershed management plan for the Enhanced Watershed Management Program Work Plan for The Dominguez Channel Watershed Management Area Group.

15. Please provide a description of how parking will be accommodated on-site and managed off-site. How will parking of 1,200 attendees for a tennis tournament / event be handled and coordinated to accommodate parking for the other uses of the Project Site, such as the soccer and athletic fields, basketball courts, learning center, etc.?

16. Will the County or Kimmelman prepare and enter into a joint-use agreement for the Project facilities with the City? Will the proposed Project prepare a feeder program with the City for other soccer, tennis and other recreation programs? These issues should be addressed in the Draft EIR.

17. There are other agencies involved in the Project and they should be described, including the Los Angeles County Sheriff Department, Los Angeles County Fire Department, LA County Sewer Maintenance District and California Water Company. In addition, Fish and Game, Fish and Wildlife, and Army Corps of Engineers permits may be necessary for modifications of the on-site drainage channel. Also, the Project will require Federal Aviation Administration review and approval, South Coast Air Quality Management District review, California Department of Toxic Substance Control review, and City of

Carson review and approval (which will require at the very least, approval over any required roadway and street intersection improvements, any required offsite infrastructure upgrades such as sewer, water, stormwater lines, or any other improvements).

18. Is the proposed Project considered a public or private Project? If public, please explain in detail what the County's role in the development of the Project will be and to what extent the Project Site will be freely open and available to the public. Will there be any charges the public for use of the Project Site facilities?

19. Please prepare a Fiscal Impact Analysis to determine the impacts of the Project on City services.

20. Please describe all off-site improvements proposed by the Project.

21. Please explain whether there will be any removal of mature trees on the landscape perimeter and what the treatment of the perimeter of the Project Site will be.

22. As the Project Site serves as a regional park area serving the City of Carson and surrounding communities, the following are a set of regional needs we would expect to have associated with a park project of this size and scope: walking trails, additional landscaping both within the Project Site and on the perimeter, a dog park, playground areas, picnic area amenities, amenities specifically targeted to aged populations, and other amenities such as a skate park.

Aesthetics

1. Please prepare a lighting plan and analyze impacts of Project lighting on surrounding sensitive receptors to the east.

2. The Draft EIR must study the potential for light spillover into surrounding neighborhoods and potential environmental impacts posed by such night-lighting.

3. Please describe what form of tree removal and replanting program will be implemented, and analyze the impacts from same.

4. Please describe how views from surrounding areas onto the Project Site will change.

5. Please provide visual simulations from different points of view from outside the Project Site boundaries such as the channel, freeway, and streets.

6. What is the landscaping treatment of the perimeter of the proposed Project? Will the proposed Project provide landscape treatment in the area nearby the Project Site (i.e., landscaped medians)? The Project should provide landscaping and wall and fence

enhancements along the east side of Avalon Boulevard in order to mitigate aesthetic impacts imposed by the Project. Please analyze these issues in the Draft EIR and ensure mitigation measures are imposed to ensure landscape treatment, landscaping, and wall and fence enhancements within and around the Project Site.

7. Will the proposed Project underground utilities in the vicinity or will utilities be located above-ground. If above-ground, aesthetic impacts must be studied and analyzed in the Draft EIR.

8. The Project should include improvements to beautify all roads leading from the 405 Freeway to the Project Site.

Air Quality

1. The Draft EIR must provide modeling of construction and operational emissions resulting from the project using the most recent version of the California Emissions Estimator Model. Worksheets outlining the model assumptions must be included. Impacts must be considered potentially significant and must be addressed in the Draft EIR.

2. Vehicle miles traveled (VMT) is an important dataset needed to perform the construction operational air quality impact assessment (AQIR), greenhouse gas (GHG) impact assessment, and energy analysis. Please describe VMT estimates for import/export of soil and other materials during construction. Please provide sufficient detail to substantiate VMT for each of the Project components for a typical day, peak or event day, and annual averages so that the AQIR, GHG impact assessment and Energy analysis are complete and robust.

3. Please provide a list of all energy efficiency features to be incorporated. Will any solar improvements be provided on-site? Please analyze this issue in the Draft EIR.

4. Because the Project Site is a capped landfill, please describe how methane monitoring and treatment would occur on-site. Please be sure to include the Project's compaction plan and describe if any routine grading, excavation for utilities and vaults, etc. would enter the trash prism or result in trash relocation. Also please provide an analysis of Project consistency with DTSC-imposed deed restrictions or other cap requirements and limitations.

5. Please describe how dust suppression will occur during construction and also for controlling dust from the use of gravel non-paved areas for parking.

6. The Draft EIR must address cumulative air quality impacts. Impacts must be considered potentially significant and must be addressed in the Draft EIR.

Biological Resources

1. Please describe potential impacts to on-site drainages.

2. The Project should utilize the on-site drainage courses within the VGC Site as a Project amenity.

Geology and Soils

1. A Geotechnical Report must be prepared and the Draft EIR must provide an analysis of geotechnical impacts based on information provided in that report.

2. Will there be trash movement and/or digging into the trash prism? If so, please analyze this issue in the Draft EIR.

3. Please consider the soil conditions in the vicinity of the Project Site. The conditions of MLK from Main Street to Avalon Boulevard should be considered. Mitigation measures should be imposed to stabilize MLK as it is the main access point to the Project Site.

4. What is the compaction plan for the Site? Please analyze this issue in the Draft EIR.

Greenhouse Gas Emissions

1. The Draft EIR must model generation of GHG emissions using CalEEMod. Impacts must be considered potentially significant and must be addressed in the EIR.

2. Please describe and analyze the Project's connection to existing transit/ridesharing/carpooling programs or enhancement/creation of new programs will reduce VMT, and the resultant GHG emissions and energy consumption.

3. Will the Project include solar collectors, battery storage, use of LED lights, etc.? Please analyze this issue in the Draft EIR.

Hazards and Hazardous Materials

1. Is there a map that shows the depth of trash and if trash relocation will be required? Will the grading plan require significant import of earth? The Draft EIR should address the environmental impacts of developing on a former landfill, including a methane plan and Project consistency with DTSC-imposed deed restrictions or other cap requirements and limitations.

2. Please describe any work that will be performed in accordance with an approved site-specific Health & Safety Plan.

3. Please ensure a Work Notice is distributed to the community prior to the start of construction (to inform on-site workers and community of planned work).

4. Please analyze and discuss compliance with the ADA requirements for all improvements including driveways, sidewalks, and wheelchair ramps within the public right of way.

5. The mitigation measures for the Project must include the repair of any broken/damaged roadway pavement and raised/sagged sidewalk, curb and gutter, and driveways within the public right of way abutting and leading to the proposed development per the City's standards and requirements to the satisfaction of the City. A complete reconstruction of MLK will be required including permanent elimination of the settlements of the road.

6. The mitigation measures for the Project must include the filling in of any missing sidewalk within the public right of way abutting the Project Site. There are no sidewalks along MLK abutting the Project Site. In addition, there are no sidewalks along portions of the Victoria Park.

7. Access rights of the public must be considered at all times. Safe and adequate pedestrian and vehicular access must be provided and maintained continuously and unobstructed.

Hydrology and Water Quality

1. The Draft EIR must address the drainage impacts that will be imposed by the Project on the Dominguez Channel and the Torrance lateral. The City is regulated under the 2012 NPDES Permit, which has increasingly stringent surface water quality requirements. These requirements include compliance with numeric limits found in the Dominguez Channel Total Daily Maximum Loads, which the campus drains to. The City is also participating in the Dominguez Channel Enhanced Watershed Management Program, which outlines a series of mitigation measures required to improve water quality, including the construction of regional stormwater detention and ground water recharge areas. The Draft EIR must analyze theses hydrology and water quality issues, including any potential impacts posed by the Project, its ability to provide regional stormwater capture from the streets and areas surrounding the Project Site, and how implementation of the Project would impact the potential degradation of water quality.

2. The Draft EIR should examine if there is underflow of contaminated ground water from the Project Site, including under the 405 Freeway to the 157-acre project (the former Cal Compact Landfill located at 20300 Main St. ("157-Acre Project")) located nearby, which includes a water treatment facility. Will the proposed Project include a water treatment facility? Please describe and analyze these issues in the Draft EIR.

Land Use and Planning

1. Please examine the goals, objectives and programs under the Carson General Plan and CMC applicable to the Project and the Project Site to determine consistency with the City's current General Plan and zoning regulations, including, without limitation, the City's Open Space Element, Traffic and Circulation Element and Parks, Recreation and Human Services Element. The Draft EIR should acknowledge the City is in the process of updating its General Plan and the proposed Project would have an impact on the General Plan Parks, Recreation and Human Services Element, among others.

2. Please examine consistency with the goals, objectives and programs of the City's Master Plan of Bikeways (dated August 2013) ("Bike Plan").

3. Please explain in detail how the County General Plan covers the proposed Project. See the General Comments above on this issue.

4. The Project will result in a reduction of the net open space available to the public and thus, based on state law, it must to be replaced 1 to 1 basis. Please describe and analyze how this issue will be addressed in the Draft EIR.

Noise

1. Will the Project prepare a noise and safety plan? If so, please describe and analyze the plan in the Draft EIR.

2. Please address CNEL impacts from construction activities and operational activities (including increased traffic) to nearby residents and schools since operations are expected into the evening and night time.

3. Will there be improvements made to the nearby residential sound wall, along the eastern side of Avalon? If so, please describe and analyze under the Draft EIR.

4. If any piles are required for the buildings and infrastructure required for the Project, please describe these in detail and analyze the noise and safety plans for the installation of such piles.

5. The City requests that potential noise impacts to offsite sensitive land uses be assessed using, at a minimum, Carson's Noise Control Ordinance (CMC, Chapter 6) and noise standards. The City has asked this of other Lead Agencies overseeing projects within the City's boundaries.

Public Services

1. The City has adopted eight (8) deficit budgets in the last eleven (11) years and is currently operating with an $8 million deficit. Implementation of the Project will potentially have significant impacts on the service levels in the community and the Draft EIR must evaluate these impacts and propose appropriate mitigation measures. In particular, the City is concerned about the impacts on public safety. The Los Angeles County Sheriff provides contract law enforcement to the City and the City contracts with the County for Fire Department services. The City does not have a specific program in place to ensure Development Impact Fees are assessed on new projects for impacts to the Fire Department and Fire Department services. There will likely be impacts to the County Fire Department given the significant increase in use at the Project Site. There will also likely be impacts to the County Sheriff Department due to increased uses at the Project Site. Please describe and analyze how will the Project finance, pay for, and mitigate the impacts to Sheriff and Fire services. The City strongly encourages the County and the County Fire Department to consider partnering with the City's proposed EIFD to fund necessary infrastructure for this Project and the surrounding areas.

2. Other costs borne by the City include maintenance of streets, sidewalks, traffic signals and other public facilities that serve the Project Site. These impacts will need to be addressed and mitigated in the Draft EIR

3. Given the need for additional Fire service resources, the City has been working with the County Fire Department for the last several years to create a new station located near Main Street and Torrance Boulevard, however, the site is small and constrained by the adjacent residential community. Instead, the new station should be located on MLK Street on the County-owned land, east of the Project's Tennis Center, which would be ideal for the new station.

4. Other significant impacts to public services may result from parking and traffic enforcement demand. Please analyze these issues in the Draft EIR

5. Please analyze and consider impacts on street maintenance, street sweeping, and landscape maintenance, parking enforcement, code enforcement.

Recreation

1. The Draft EIR should review the potential negative and positive impacts to the City's park system and recreational programs. In particular, please discuss the impacts on Victoria Park, adjacent to the Project Site and if there are any County plans to improve the Victoria Park and the timing of these improvements. The City would like to discuss with the County the future plans for Victoria Park.

Traffic and Transportation

1. The proposed Project is a unique use and will generate much greater traffic and will result in much different traffic patterns and numbers in comparison to the current use for the Project Site. In addition

2. The traffic impact analysis for the Draft EIR should analyze typical day uses, and event uses, and must study traffic volumes and impacts that will result to the entire VGC Site as a result of the Plenitude Project and this Project and both will be redeveloped concurrently. A detailed traffic impact study ("TIS") should quantify the volumes of traffic that are generated by the current golf course use (based on actual counts), estimate the volumes of traffic that would be generated by the proposed uses (for both projects) on a typical day of activity, and then quantify the net increases in traffic volumes associated with the Project. Average Daily Traffic ("ADT") and AM/PM peak hour volumes on all significantly affected streets (including crossroads and controlling intersections).

3. The Draft EIR should utilize the findings of the SFA in analyzing traffic impacts.

4. Please provide a detailed parking demand analysis to determine the necessary parking numbers for both projects, including all new facilities proposed both for the Project and the Plenitude Project. The City has limited parking on the streets in the vicinity. Additionally, the TIS must address parking demand management strategies to include, but not be limited to, flexible school hours, subsidized transit passes and improved transit connections to the Metro stations.

5. Mitigation measures must be considered with special consideration and analysis to the development of alternate solutions to circulation impacts that do not rely on increased roadway construction. All mitigation measures studied must be fully discussed, including financing, scheduling, implementation responsibilities, and lead agency monitoring. Additionally, the TIS must address parking demand management strategies.

6. Calculation of cumulative traffic volumes must be considered for impacts created by the various components of the Project as well as the adjacent Plenitude Project, both existing and future, as the same will impact the City.

7. The TIS prepared for the Draft EIR should evaluate and analyze the impacts to local roadways, determine whether street widening is required, and determine whether intersection improvements or traffic light upgrades are required at the following intersections: MLK Street/Avalon Blvd, MLK Street/Main Street, Avalon/Del Amo, Avalon/I-405 Freeway ramps, Avalon/University, Avalon/Victoria, Avalon/Albertoni, Avalon/91 Freeway ramps, Main/Broadway, Main/I-405 Freeway ramps, Main/Victoria, Main/Albertoni, Main/91 Freeway ramps, Albertoni/91 Freeway ramps, and the site

access driveways in order to mitigate traffic impacts imposed by the Project. This list of study area intersections could potentially be reduced or expanded based on the results of the traffic generation and distribution assumptions. Please contact Mr. Richard Garland, City of Carson Traffic Engineer at (310) 830-7600 (ext. 1815) to define the study area, confirm trip generation rates, and discuss the overall methodology of the TIS.

8. The TIS for the Draft EIR should analyze impacts associated with the consistency with the City's Bike Plan. The City has been attempting to implement a bike lane along the Dominguez Channel, and at the very least, requires an easement on the County Golf Course to facilitate this regional bike path. It is our understanding that the County Parks and Recreation Department is currently reviewing the easement request. The Project could have the potential of impacting a regionally significant bike path and should be reviewed in the Draft EIR. Also, the Project does not contain sufficient detail, if any, as to whether dedicated transit will be provided and if there are any bike facilities/pathway linkages from the Project Site to the City's bike lanes and paths as outlined in the City's Bike Plan. To mitigate the impacts of the Project, the Project shall be required to construct the bike lanes surrounding the Project Site including Dominguez Channel, MLK, and Avalon.

9. The Project should consider providing an on-site transit facility to mitigate the traffic impacts on the City streets as well as its imposition of noise and air pollution.

10. The Draft EIR must address sufficiency of emergency access to proposed facilities. Impacts are considered potentially significant and must be addressed in the Draft EIR. Without adequate emergency access roads, the Project could have a potential significant impact on public safety. The Draft EIR should examine access to the fields in particular, which are located to the far interior of the Project, away from the public streets serving the Project Site. Internal safety access roads may be necessary to adequately serve this remote area.

11. The Project mitigation measures for traffic need to assess and include both the Project Site and Plenitude Project, since there will be many trips that are attributable to both projects and the impacts of both projects collectively, will be much different than if analyzed separately. Will either or both of these projects include any improvements to the 405 Freeway and the Main Street freeway off-ramp? What mitigation measures will be incorporated to relieve traffic congestion on Avalon Blvd.? Are any new traffic lights or intersection modifications necessary? Will the Project include directional signs at the Main Street off-ramp, as well as way-finding sigs on Main Street to assist patrons in reaching MLK and the Project Site entries?

12. MLK is not classified as a major thoroughfare and the Project needs to be corrected in this classification.

13. Impacts to the I-405 Freeway and Main interchange and other nearby interchanges need to be analyzed in the TIS and provide mitigation measures as necessary.

14. The Draft EIR should identify the existing transit operators that serve the Project Site and the transit impacts of the Project.

Utilities

1. The Draft EIR should discuss if the existing golf course is served by a water treatment system on the Project Site, and whether and how the system would be utilized by the Project.

2. Is reclaimed water available to serve the Project or would it be extended and used for irrigation purposes? The Draft EIR should document the availability of reclaimed water in the area (as supplied by the West Basin Municipal Water District) for irrigation purposes.

3. Although not included in the Initial Study, the City would like to see an Energy Conservation section to the Draft EIR, in accordance with Appendix F of the CEQA Guidelines.

Cumulative Impacts

1. As described in detail above, it is extremely difficult to effectively evaluate the full extent of the Project's environmental impacts, especially the traffic and circulation impacts of the Project and impacts on public safety and City services, since the Draft EIR only proposes to review the 87 acres of the 187-acre golf course redevelopment project. The potential impacts of the future redevelopment of the entirety of the VGC Site are not discussed. The Draft EIR should examine the potential revenues and costs of the City services provided to the Project as well as the Plenitude Project.

Mandatory Findings of Significance

1. Please include a description and analysis of the growth-inducing impacts of the Project.

2. Please explain the extent to which the Project will require new or increased City services, new roadways, utilities, and other public facilities.

Alternatives

1. As a part of the Draft EIR, the County must a conduct thorough evaluation of alternatives to the Project (including the "No Project" alternative). The Draft EIR must describe a range of alternatives to the proposed Project, and to its location, that would feasibly attain

the County's basic objectives while avoiding or substantially lessening the significant impacts from implementation of the Project. Pub. Res. Code § 21 100(b)(4); CEQA Guidelines § 15 126.6(a).

2. A legally sufficient analysis of alternatives is essential to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened. Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126.6(a). The EIR must carefully analyze alternatives that reduce impacts on the City, its public and private facilities and infrastructure, and on its residents.

And finally, please note that the City of Carson requests additional scoping with the County and Kimmelman pursuant to CEQA Guidelines § 15083. In particular, the City requests to be engaged in the scope of the technical studies (*i.e.,* traffic, etc.) as well as project alternatives. Separately, City staff has met with both the development teams from Plenitude Holdings and Kimmelman and agreed that further meetings should be held with the County, their teams and the City, which will involve the planning and environmental teams for both projects. The issues addressed, action items taken, and results of these meetings should be included as part of the Draft EIR for the Project.

The City of Carson thanks you for considering these comments as these are highly sensitive concerns for us. Please feel free to contact me at (949) 223-1170 if you have any questions or would like to discuss these concerns in further detail.

Very truly yours,

ALESHIRE & WYNDER, LLP

Danny Aleshire
Legal Counsel for the City of Carson

cc (*via email*): Kenneth Farfsing, City Manager
John Raymond, Assistant City Manager
Saied Naaseh, Community Development Director
Danielle Griffith, Environmental Science Associates (ESA)
Heidi Rous, ESA

Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: Sandra Lewis

Affiliation: Resident

Address: 742 E. Tumont St.

City, State, Zip Code: Carson, CA 90746

Phone (optional):

E-mail (optional):

Would you like to remain on our mailing list to receive future project updates? Yes___ No X

Comments:

1. Have the Golf Course been sold?
2. What is Draft EIR.?
3. What underserved Youths are you referring to from the Carson area?
4. Concern regarding safety and noise for this project in our area.

Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: DAVID JEFFERS

Affiliation: CARSON RESIDENT

Address: 17524 RAINSBURY AVE

City, State, Zip Code: CARSON, 90746

Phone (optional):

E-mail (optional):

Would you like to remain on our mailing list to receive future project updates? Yes ✓ No ___

Comments:

(1) WHERE IS RIDLEY THOMAS?

(2) WHAT BENEFITS/CONCESSIONS ARE BEING MADE FOR GOLF PATRONS?

(3) WHY IS THE USTA INVOLVED? THERE IS ALREADY A USTA FACILITY IN CARSON THAT RESIDENTS CAN'T USE!

(4) WHERE IS RIDLEY THOMAS AND WHY WON'T HE ADDRESS THE LOCAL COMMUNITY?

Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: Verleane Bereal

Affiliation: Resident

Address:

City, State, Zip Code:

Phone (optional):

E-mail (optional): vbereal@yahoo.com

Would you like to remain on our mailing list to receive future project updates? Yes ✓ No ___

Comments:

Any residents whose neighborhoods could be adversely affected by traffic need to be invited to a special meeting to discuss the possible impact and proposed remedies. I was told that Elsmere is a street that will be extended to lead into the complex. Not sure if Turmont or other streets will also be extended. Special notification needs to go to residents on these streets.

Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: ARTHUR WILLIAMS

Affiliation: UNIVERSITY HEIGHTS HOMEOWNERS ASSOCIATION

Address: 701 LOYOLA AVE., ~~CARSON, CA. 90746~~

City, State, Zip Code: CARSON, CA. 90746

Phone (optional):

E-mail (optional): ATWILL29200@MSN.COM

Would you like to remain on our mailing list to receive future project updates? Yes X No____

Comments:

IT APPEARS THAT THIS PROJECT IS DESIGNED TO PRIMARILY BENEFIT YOUTH, ALTHOUGH I QUESTION THAT IT IS TO SERVE UNDERSERVED YOUTH. WHO ARE THESE UNDERSERVED YOUTH. MY CONCERNS ARE MANY, INCLUDING THE ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED. ADDITIONALLY, HOW DOES THIS PROJECT BENEFIT THE SURROUNDING COMMUNITIES WHERE AT LEAST 60% OF THE RESIDENTS ARE OVER THE AGE OF 60? I FEEL THERE SHOULD BE FACILITIES TO ACCOMODATE THAT POPULATION SPECIFICALLY: i.e: AN INDOOR AND OUTDOOR EXERCISE FALICITY FOR SENIORS AND APPROPRIATE AMENITIES FOR DISABLED PERSONS.

I THINK IT IS FINE TO: HAVE TENNIS COURTS AND SOCCER FIELDS BUT IS IT NECESSARY TO HAVE 50 TENNIS COURTS AND 8 SOCCER FIELDS? THIS SPACE COULD BE MORE APPROPRIATELY USED FOR COMMUNITY PROGRAMS, AS YOU SAY, FOR ADULTS WHO DO NOT ENGAGE IN TENNIS OR SOCCER.

ANOTHER CONCERN IS ABOUT THE ROAD, MARTIN LUTHER KING, JR. STREET: WHO WILL BE RESPONSIBLE FOR CORRECTING IT, AND HOW/WHAT WILL BE DONE

Comments (continued)

TO FIX IT?

YET ANOTHER CONCERN IS ABOUT OUR PROPERTY VALUES. WILL PROPERTY VALUES INCREASE AS A RESULT OF THIS PROJECT, AND, IF SO, WILL OUR PROPERTY TAXES INCREASE? ~~IMG~~ FOR SOME RESIDENTS, PROPERTY TAXES ARE ALREADY EXORBITANT!

Please fold in thirds

Please tape it closed, affix a stamp, and mail by August 31, 2018. Thank you!



31 AUG 2018 PM 11 L

County of Los Angeles Department of Public Works

Project Management Division II

900 South Fremont Avenue, 5th Floor

Alhambra, California 91803

Attn: Ryan Kristan

91803-139100

CT

August 11, 2018

Ryan Kristan
County of Los Angeles Department of Public Works - Project Management Division II
900 South Fremont Avenue, 5th Floor,
Alhambra, CA 91803

Re: Carol Kimmelman Sports and Academic Campus // To: 3M Company

Case No.

Dear Sir/Madam:

After checking our records and the records of the State of CA, it has been determined that C T Corporation System is not the registered agent for an entity by the name of 3M Company.

CT was unable to forward.

Very truly yours,

C T Corporation System

Log# 533860771

Sent By Regular Mail

cc: --

(Returned To)

Ryan Kristan
County of Los Angeles Department of Public Works - Project Management Division II
900 South Fremont Avenue, 5th Floor,
Alhambra, CA 91803

Nicole Cobleigh

From: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Sent: Tuesday, September 4, 2018 8:10 AM
To: Derek.Galey@lw.com; Nicole Cobleigh
Subject: FW: Concerns about Development Victoria Park Golf Course

Derek and Nicole,

Please see below for comments on the Kimmleman NOP.

Ryan

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
Office (626) 300-3271
Cell (213) 840-7004

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From: david hollaway <hollaway.david@gmail.com>
Sent: Friday, August 31, 2018 2:57 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Subject: Concerns about Development Victoria Park Golf Course

Dear Ryan,

I am reaching out to you regarding the redevelopment of the Victoria Park Golf Course. I am part of a group of long time District 2 members that have serious concerns about the amenities being offered in the redevelopment.

To start, we believe the project is being planned with very little knowledge of the sporting needs of local community. While we are certainly excited about the amenities (soccer center and tennis courts) in the new development, we believe that football and track are being either ignored or overlooked. Anyone with knowledge of the District 2's rich history in producing football, basketball, and track athletes would surmise that to install 27 tennis courts and 10 soccer fields is not meeting all of the needs of the community and is a disservice to the boys and girls who participate in youth sports in this area.

Furthermore, I would like to state a few well-known facts about District 2:

- District 2 has the one of the **richest football histories in the United States**.
- Carson, Inglewood, Baldwin Youth football & cheer programs have been in existence for **more than 50 years**.
- **Tens of millions of dollars** in football and track scholarships have been awarded to District 2 residents.
- District 2 has produced **hundreds professional athletes** in football, basketball, and track.
- The **five square mile area (Carson, Compton, Gardena, LA) surrounding** the project has produced tens of thousands of college football and basketball players and track athletes.

We believe that for this project to fully meet the needs of District 2 residents the project must respect the tradition and needs of District 2 community members as well as consider input from individuals with a deep knowledge of the youth sporting scene.

I have been a District 2 resident for a period of 47 years. I participated in youth football and basketball at Victoria Park, coached various youth programs, and was president of a District 2 youth football program for 8 years.

At your convenience we would like to discuss our concerns in front of the appropriate audience. We believe that our concerns are valid and the remedy to those concerns reasonable. Here is what we would like to discuss:

- Installing lined football fields.
- Installing a full track.

We look forward to your prompt response.

Regards,

David Hollaway

Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: Janice Sumpter
Affiliation: Resident
Address: 1842 E. Abbottson St
City, State, Zip Code: Carson, CA 90746
Phone (optional):
E-mail (optional): JrSumpter4@Yahoo.com
Would you like to remain on our mailing list to receive future project updates? Yes X No___

Comments:

I would like to see a real meeting NOT an scoping meeting, where we can ask questions that can be answered.

How is this project going to affect the Residence As Far as Taxes, ? who is paying for the lighting water ect. ?

Where is the Staffing Coming from?

Who are you targeting? Our tennis Courts are not being used to the Compacity now.

Why was the city of Carson Chosen For this Project Location?

Comments (continued)

Who are the people that are going to be Bused in to use the Courts and Soccer fields?

Will there be a Charge?

who is Conducting EIR Report?

Will Mark ridley-Thomas be Showing up to any of the Community meeting??

Why wasn't more resident's informed regarding This meeting?

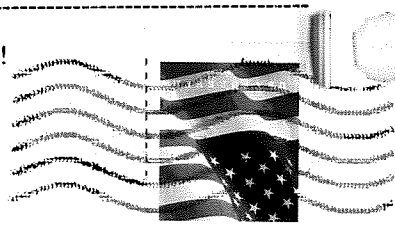
20 AUG AM 9:40

Please fold in thirds

Please tape it closed, affix a stamp, and mail by August 31, 2018. Thank you!

LOS ANGELES CA 900

17 AUG 2018 PM 1:3



County of Los Angeles Department of Public Works

Project Management Division II

900 South Fremont Avenue, 5th Floor

Alhambra, California 91803

Attn: Ryan Kristan

91803-133100

Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: Lisa Bullock

Affiliation:

Address: 19621 Dunbrooke Avenue

City, State, Zip Code: Carson, Ca 90746

Phone (optional):

E-mail (optional): lisadabohn@sbcglobal.net

Would you like to remain on our mailing list to receive future project updates? Yes X **No**____

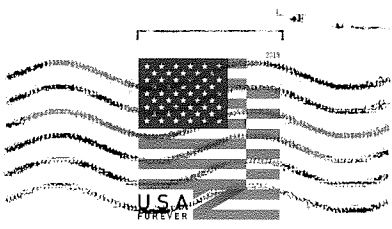
Comments:

Hello. I live across the street from the current golf course on the opposite side of Avalon. I am 4 houses South of Elsmere and based on the map that's been provided it looks like construction will be taking place across from the backyards of the houses on Dunbrooke. I would like to request that measures are taken to put up Dayton tarps to stop the dust from crossing the street (Avalon) into our backyards. There was previous work done across at the golf course a few years ago and no barriers were put up so we had to endure the dirt in our backyards and daily dust/dirt in our homes. Please be considerate of the neighbors on this go round Thank you Lisa Bullock

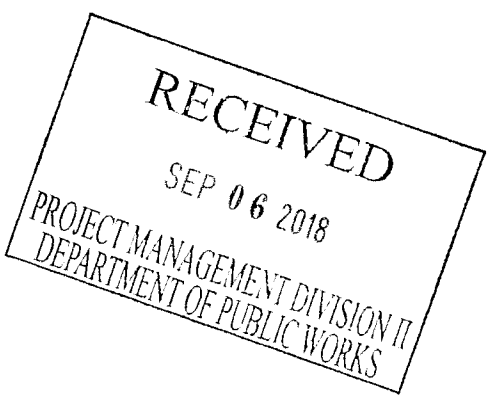
Comments (continued)

---Please fold in thirds---

Please tape it closed, affix a stamp, and mail by August 31, 2018. Thank you!



County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Avenue, 5th Floor
Alhambra, California 91803
Attn: Ryan Kristan



Carol Kimmelman Sports and Academic Campus Project EIR
Scoping Meeting Comments

Please hand in to County staff at the meeting or mail back by Friday, August 31, 2018.

Name: SHIRLEY VERNON

Affiliation: RESIDENT of CARSON, CA. 90746

Address: 18806 TOWNE AVE.

City, State, Zip Code: CARSON, CA. 90746

Phone (optional):

E-mail (optional): SVERNON7113@SBCGLOBAL.NET

Would you like to remain on our mailing list to receive future project updates? Yes X No ___

Comments: I AM CONCERNED ABOUT THE HAZARDOUS CHEMICALS AND MATERIALS IN THE GROUND WHERE YOU ARE GOING TO PUT THE TENNIS COURTS AND SOCCER FIELDS. THIS WOULD BE VERY DANGEROUS FOR THE CHILDREN AND ADULTS USING THEM.

WE GET A LOT of TRAFFIC IN VICTORIA PARK (VICTORIA ST ON THE NORTH - MARTIN LUTHER KING JR ST ON THE SOUTH - AVALON ON THE EAST AND MAIN ST ON THE WEST) FROM THE STUBHUB CENTER. THEY PUT UP BARRICADES TO KEEP CARS FROM PARKING IN VICTORIA PARK. IT DOES NOT WORK AS THE PERSON AT THE BARRICADE DOES NOT STOP ANYONE FROM COMING INTO VICTORIA PARK. WE HAVE REGISTERED PERMITS FOR US TO PARK IN VICTORIA PARK.

WE DO NOT WANT ANY MORE TRAFFIC + NOISE FROM YOUR PROJECT. THANK YOU

Comments (continued)

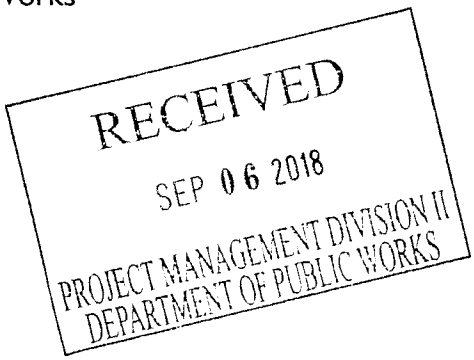
Please fold in thirds

Shirley K. Vernon
18806 Towne Ave.
Carson, CA 90746

sed, affix a stamp, and mail by August 31, 2018. Tha



County of Los Angeles Department of Public Works
Project Management Division II
900 South Fremont Avenue, 5th Floor
Alhambra, California 91803
Attn: Ryan Kristan



Nicole Cobleigh

From: rkristan@dpw.lacounty.gov
Sent: Wednesday, August 15, 2018 1:40 PM
To: Derek.Galey@lw.com; Nicole Cobleigh
Subject: FW: Kimmelman EIR Scoping Meeting Comments
Attachments: Kimmelman EIR Scoping.pdf

Derek and Nicole,

Please see the email below with the referenced attachment. This is in response to last night's meeting.

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
Office: (626) 300-3271

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From: vince goshi <vincegoshi@cox.net>
Sent: Tuesday, August 14, 2018 7:41 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Subject: Kimmelman EIR Scoping Meeting Comments

Ryan:

It was a pleasure talking to you. As I said at the meeting, none of what we say is meant as personal to you. I know you have a job to do. We are fighting as hard as we can to try to save a golf course at Victoria. We know it is an uphill battle against organizations that have interest other than ours and have a lot more money and political clout. But, we are fighting nonetheless.

I have attached the comments I told you I had. If you want it in Word format, I can send that to you.

Regards;
Vince Goshi
310 303 9218 (cell)

Carol Kimmelman Sports and Academic Campus Project EIR

Scoping Meeting Comments

Name: Vincent S. Goshi

Affiliation: Golfer at Victoria Golf Course

Address: 28610 Mount Rushmore Road

City, State, Zip Code: Rancho Palos Verdes, CA, 90275

Phone: 310-303-9218 (cell)

E-mail: vincegoshi@cox.net

Include me in future project updates

Comments:

1) Request that EIR include impact changing environment from a golf course to a tennis center will have on the many golfers who use the golf course including senior golfers, youth golfers, high school and college golfers, instructors, etc. Please evaluate what impact changing this environment will have on the physical and mental health of seniors who use the golf course for exercise and mental stimulation. Interview at least 50 seniors who regularly use the golf course to get an objective and empirical assessment of the impact to this group. Please include quantitative analysis of known current use and what known tennis use will be. Please provide supporting data for analysis.
2) Request EIR include impact to senior golfers 65 and over who play most weekdays between dawn and 0700. Senior golfers holding senior discount cards cannot make reservations weekdays between 0700 and 0900. So, many start play before 0700 and play in about 3 hours versus 5 hours-6 hours with a later start. If these golfers are forced to move to another County course in the area,

please describe impact to new seniors moving to new course and existing seniors at that course who play at the same times. Describe impact to these golfers experience. (see attached list of current early morning senior golfers dubbed dawn patrol for substantiation.)

3) Please include analysis of what construction on this former landfill will have on Towne Elementary school and whether all statutory and regulatory requirements regarding construction so close to a school will have on students, teachers, and staff.
4) Please include studies on what chemical and toxic substances might be transported to the surrounding schools and neighborhood because of construction on the site. Please identify all toxic substances buried under the site and what measures will be used and approved to prevent these substances from infiltrating surrounding neighbors. Please discuss what effects will be if these substances are ingested by people because of the construction.
5) Please include reports from the Department of Toxic Substance Control (DTSC) that approve of any construction to be accomplished on the site.

Week Day Dawn Patrol Players At Victoria GC

Before 0700 Start Times

Name	Age	M	T	W	Th	F
Vinny's Group (8)						
Vincent Goshi	74	X	X	X	X	X
Shinja Miyata	72	X	X	X	X	X
Tad Maeda	75	X	X		X	X
Tad Asanuma	76	X	X	X		X
Calvin Hokama	67	X	X	X	X	X
John Steible	80			X		X
Toshi Fujimura	73		X			X
Jim Takata	76			X		
Corona Group (3)						
Terry Woolsey	70					x
Alan Shaw	71					x
Denny Weems	70					x
Roman's Group (4)						
Bill Hayward	81	x	x			x
Roman Peebles	76	x	x			x
Willie Bostic	84	x				x
Greg Taylor	69	x		x		x
Hutch's Group (5)						
Hachiro Maewaki	93	x		x		x
Katsumi Ota	80	x		x		x
Fred Abarentos	75	x		x		x
Bob Uehara	84	x		x		x

Ernie	73			x		

Name	Age	M	T	W	Th	F
Ortega's Group (5)						
Rubin Flores	67				x	x
Mike Ortega	68	x		x		x
Brad Godfrey	80	x		x		x
Mike Glynn	76	x		x		x
Harold Bailey	60	x		x		x
Akamai Group (25)						
Juan Aguirre	72	x				
Elton Hirasuna	72	x				
Wesley Kitamura	71	x				
Ronald Babick	76	x				
Ron Masuda	74	x				
Larry Ume	69	x				
Makayuki Orie	71	X				
Donald Reed	71	x				
Ron Tabura	69	x				
Tony Arce	79	x				
Dennis Paelinawan	74	x				
Michael McAlister	66	x				
Tom Kawate	76	x				
Jim Austin	68	x				
Ron Teunon	78	x				
Jorge Oller	77	x				
Elliot Matsuoka	74	x				
Yoshi Kawamoto	71	x				

Name	Age	M	T	W	Th	F
Akamai Group (Con't)						
Rolando Millan	68	x				
Camberto Sanchez	81	x				
Horace French	71	x				
Laverne Parics	70	x				
Harry Tlukaota	81	x				
David Martin	72	x				
Nori Hanaoka	68	x				

Nicole Cobleigh

From: rkristan@dpw.lacounty.gov
Sent: Wednesday, August 15, 2018 3:27 PM
To: Derek.Galey@lw.com; Nicole Cobleigh
Subject: FW: Kimmelman EIR Scoping Meeting Comments

Derek,

Please see comment on IS.

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
Office: (626) 300-3271

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From: vince goshi <vincegoshi@cox.net>
Sent: Wednesday, August 15, 2018 3:13 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Subject: RE: Kimmelman EIR Scoping Meeting Comments

Ryan:

I have reviewed the initial EIR study listed on the Kimmelman site. It totally ignores negative impacts to some 2200+ people who signed a petition to KEEP GOLF AT VICTORIA. I have electronic copies of all these signatures which I can send in a link. This would appear to be a major omission from the report.

Thanks:.
Vince

From: Ryan Kristan (Consultant) [mailto:rkristan@dpw.lacounty.gov]
Sent: Wednesday, August 15, 2018 1:38 PM
To: vince goshi <vincegoshi@cox.net>
Subject: RE: Kimmelman EIR Scoping Meeting Comments

Good Afternoon Vince,

I have received both of your emails sent last night. Thank you for the comments and information. We will respond accordingly.

Thanks again,
Ryan

Ryan Kristan, Architect
Project Manager

Los Angeles County Public Works
Office: (626) 300-3271

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From: vince goshi <vincegoshi@cox.net>
Sent: Tuesday, August 14, 2018 9:53 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Subject: RE: Kimmelman EIR Scoping Meeting Comments

One more thing, I have attached the cover from Plenitude's brochure that has the County seal but no mention of Plenitude. I asked Fred Macfarlane if he had permission to use the seal on the cover when the brochure is not a County document. He told me he did not have to have permission. I told Fred that he was being deceptive in presenting the brochure like that. He flat out said "no he was not." At that point I told him I did not want to talk to him anymore. What a prick for a PR guy.

From: vince goshi [mailto:vincegoshi@cox.net]
Sent: Tuesday, August 14, 2018 7:41 PM
To: Ryan Kristan (rkristan@dpw.lacounty.gov) <rkristan@dpw.lacounty.gov>
Subject: Kimmelman EIR Scoping Meeting Comments

Ryan:

It was a pleasure talking to you. As I said at the meeting, none of what we say is meant as personal to you. I know you have a job to do. We are fighting as hard as we can to try to save a golf course at Victoria. We know it is an uphill battle against organizations that have interest other than ours and have a lot more money and political clout. But, we are fighting nonetheless.

I have attached the comments I told you I had. If you want it in Word format, I can send that to you.

Regards;
Vince Goshi
310 303 9218 (cell)

Nicole Cobleigh

From: Derek.Galey@lw.com
Sent: Friday, August 17, 2018 5:48 PM
To: Michele Webb; Nicole Cobleigh
Cc: MARIA.HOYE@lw.com
Subject: FW: Challenge Accommodating Displaced Senior Golfers
Attachments: letter_to_Garcia.pdf

Michelle,

Here is another one. Please make sure this letter finds its way to Nicole for inclusion in the record for the scoping meeting.

Best,
Derek

From: vince goshi <vincegoshi@cox.net>
Sent: Tuesday, August 14, 2018 8:03 PM
To: Mihlsten, George (LA) <GEORGE.MIHLSTEN@lw.com>
Subject: Challenge Accommodating Displaced Senior Golfers

George:

It was nice meeting and chatting with you at the EIR Scoping meeting. Perhaps the best way I can describe the challenge is to have you read the letter I sent to Chief Deputy Norma Garcia, Parks & Recreation, that describes the challenge and why it will be extremely difficult to accommodate us at the other County courses, see attached letter.

I know I'm biased but from my perspective, it feels cruel and mean to throw all of us under-the bus after we've been here for half a century. We've been a constituent all this time, and still are, and it seems just plain wrong to throw us all out even though Kimmelman is bringing millions to the table. They have never been here, still aren't, the main argument is they are bringing millions to the County. If that were the main objective of these facilities, which they are not, then all the golf courses could be used that way. The only reason Victoria is a target is because the fairways are subpar so it does not generate as much income as other courses. But, the condition of the fairways is a failure of the County, not us golfers.

Anyway, you asked for this information so here it is. You seem like a resourceful guy, good luck. I hope you can come up with something good.

Regards:
Vince Goshi

310 303 9218 (cell)

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August 13, 2018

Vincent Goshi
28610 Mount Rushmore Road
Rancho Palos Verdes, CA 90275
vincegoshi@cox.net
310 303 9218 (cell)

Sent via email

Ms. Norma Garcia
Chief Deputy Director, Department of Parks and Recreation
Los Angeles County

Subject: Victoria Golf Course Repurpose, Senior Dawn Patrol Players

Dear Chief Deputy Director Garcia:

This letter is a follow-up to our telephone conversation last Monday, August 6, 2017. I wanted to direct your attention to a comment you made about making arrangements or accommodating us at the other nearby county courses if Victoria's course is closed. This will be extremely difficult if not impossible to do for a large group of seniors all of whom are 65 or older, pay $28 a year to get a senior citizen golf ID card, and reserve starting times before 7 AM on weekdays. These reservations cannot be made between 7 AM and 9 AM so all of us seniors start early. Most courses refer to these players as the "dawn patrol" because we start before sun-up in order to get everyone out before 7 AM. I play at Victoria early every weekday morning so I know all the groups that do this. I have enclosed a list of the groups and people that do this at Victoria and the number in each group. There are a total of approximately 50 seniors who do this, with Monday being the busiest when approximately 42 play (see enclosed tables).

It will be practically impossible to accommodate these groups at the other courses because each course has their own "dawn patrol" groups. Sending this many people to, say, Alondra, will create a very unpleasant situation not only for us but for the seniors at Alondra. Playing after 9 AM is also unpleasant because whereas we play in about 3 hours starting early, starting after 9 AM means 5 hour – 6 hour rounds. This is why we start early.

I wanted to send you this information so people who are making decisions that could close Victoria know what this would mean to real people. These are people who worked all their lives and supported Victoria all these years and now want to enjoy their retirement.

Please pass this information on to those who will be making the decisions.

Thank You.

Vincent S. Goshi
310 303 9218 (cell)

Week Day Dawn Patrol Players At Victoria GC
Before 0700 Start Times

Name	Age	M	T	W	Th	F
Vinny's Group (8)						
Vincent Goshi	74	X	X	X	X	X
Shinja Miyata	72	X	X	X	X	X
Tad Maeda	75	X	X		X	X
Tad Asanuma	76	X	X	X		X
Calvin Hokama	67	X	X	X	X	X
John Steible	80			X		X
Toshi Fujimura	73		X			X
Jim Takata	76			X		
Corona Group (3)						
Terry Woolsey	70					x
Alan Shaw	71					x
Denny Weems	70					x
Roman's Group (4)						
Bill Hayward	81	x	x			x
Roman Peebles	76	x	x			x
Willie Bostic	84	x				x
Greg Taylor	69	x		x		x
Hutch's Group (5)						
Hachiro Maewaki	93	x		x		x
Katsumi Ota	80	x		x		x
Fred Abarentos	75	x		x		x
Bob Uehara	84	x		x		x

Ernie	73			x		

Name	Age	M	T	W	Th	F
Ortega's Group (5)						
Rubin Flores	67				x	x
Mike Ortega	68	x		x		x
Brad Godfrey	80	x		x		x
Mike Glynn	76	x		x		x
Harold Bailey	60	x		x		x
Akamai Group (25)						
Juan Aguirre	72	x				
Elton Hirasuna	72	x				
Wesley Kitamura	71	x				
Ronald Babick	76	x				
Ron Masuda	74	x				
Larry Ume	69	x				
Makayuki Orie	71	X				
Donald Reed	71	x				
Ron Tabura	69	x				
Tony Arce	79	x				
Dennis Paelinawan	74	x				
Michael McAlister	66	x				
Tom Kawate	76	x				
Jim Austin	68	x				
Ron Teunon	78	x				
Jorge Oller	77	x				
Elliot Matsuoka	74	x				
Yoshi Kawamoto	71	x				

Name	Age	M	T	W	Th	F
Akamai Group (Con't)						
Rolando Millan	68	x				
Camberto Sanchez	81	x				
Horace French	71	x				
Laverne Parics	70	x				
Harry Tlukaota	81	x				
David Martin	72	x				
Nori Hanaoka	68	x				

Nicole Cobleigh

From: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Sent: Monday, August 27, 2018 8:36 AM
To: Nicole Cobleigh; Derek.Galey@lw.com
Subject: FW: Data To Use For EIR Regarding Recreational Impacts To Existing Victoria Golf Course And/Or Golf Facilities Usage
Attachments: usage_IMG_20180823_0002_NEW.pdf; Dawn Patrol Players At Victoria GC.pdf

Good Morning Nicole and Derek,

Please see email below and attached regarding the environmental documents.

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
Office (626) 300-3271
Cell (213) 840-7004

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From: vince goshi <vincegoshi@cox.net>
Sent: Friday, August 24, 2018 4:44 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Subject: Data To Use For EIR Regarding Recreational Impacts To Existing Victoria Golf Course And/Or Golf Facilities Usage

Ryan:

I collected empirical data on how many people are currently using Victoria Golf Course and/or the golf facilities for recreation on a regular basis. This list does not include people who are occasional users of the facilities, just ones who use it regularly. Here is the data in summary form:

Victoria Senior Men's Club – 59 members, all seniors
Gauchos and Gringos Golf Club – 84 members, all seniors
Victoria Women's Golf Club – 20 members, all seniors
High Schools – 150 players (see attached usage for list)
Colleges – 55 players (see attached usage for list)
Jr. Programs – 400+, all youngsters (see attached usage for list)
Instruction – 375 (see attached usage for list)
Player's Club – 500 + (people who pay $40 per month to hit balls at the driving range)

Total tally = 2011 people that use the golf course and/or golf facilities on a regular basis. Some double counted, e.g., Player's club people, but tally is close.

Additionally, there are between 40-50 senior golfers who play every weekday before 7 AM. These seniors are listed in the attachment dawn patrol. It will be impossible for these seniors to go to another County course and get pre-7 AM tee times if the course gets closed.

As part of the environmental impact of Kimmelman's project, I request that the impact to these people's recreation be included. As you know, neither Kimmelman's or Plenitude's plans provide anything for this group of people. I would be interested in seeing what the report comes up with and what mitigation measures will be proposed to address the major loss of recreation for this group of people.

Regards:
Vince Goshi
310 303 9218 (cell)

High School	Contact	Golfers
North Torrance	Dean	22
South Torrance	Kelly Wood	20
Carson		15
Peninsula	Glen Van Enk	15
Torrance	Sherri Carr	20
Chadwick	Gus Sartorious	12
Palos Verdes	Ray Rivera	26
Mira Costa	tracy Gellere	20

Colleges

CSUDH	Ron Eastman	15
El Camino	Stacy Komai	15
Marymount University	Mike Miller	25

Junior Programs

First Tee	Christopher Steel	100+
US Kids	Gary Mizumoto	140+
Nike Golf	Jason Bae	70+
LA County Jr Golf	Mike McMongeal	80+

Instructors	Lessons per week
Larry Schneider	35
Eric Manley	50
Jason Bae	55
Russ Fraser	30
Don Brown	70
Taka	60
Cheech	30
Tod Di Angeles	45

Week Day Dawn Patrol Players At Victoria GC

Before 0700 Start Times

Name	Age	M	T	W	Th	F
Vinny's Group (8)						
Vincent Goshi	74	X	X	X	X	X
Shinja Miyata	72	X	X	X	X	X
Tad Maeda	75	X	X		X	X
Tad Asanuma	76	X	X	X		X
Calvin Hokama	67	X	X	X	X	X
John Steible	80			X		X
Toshi Fujimura	73		X			X
Jim Takata	76			X		
Corona Group (3)						
Terry Woolsey	70					x
Alan Shaw	71					x
Denny Weems	70					x
Roman's Group (4)						
Bill Hayward	81	x	x			x
Roman Peebles	76	x	x			x
Willie Bostic	84	x				x
Greg Taylor	69	x		x		x
Hutch's Group (5)						
Hachiro Maewaki	93	x		x		x
Katsumi Ota	80	x		x		x
Fred Abarentos	75	x		x		x
Bob Uehara	84	x		x		x

Ernie	73			x		

Name	Age	M	T	W	Th	F
Ortega's Group (5)						
Rubin Flores	67				x	x
Mike Ortega	68	x		x		x
Brad Godfrey	80	x		x		x
Mike Glynn	76	x		x		x
Harold Bailey	60	x		x		x
Akamai Group (25)						
Juan Aguirre	72	x				
Elton Hirasuna	72	x				
Wesley Kitamura	71	x				
Ronald Babick	76	x				
Ron Masuda	74	x				
Larry Ume	69	x				
Makayuki Orie	71	X				
Donald Reed	71	x				
Ron Tabura	69	x				
Tony Arce	79	x				
Dennis Paelinawan	74	x				
Michael McAlister	66	x				
Tom Kawate	76	x				
Jim Austin	68	x				
Ron Teunon	78	x				
Jorge Oller	77	x				
Elliot Matsuoka	74	x				
Yoshi Kawamoto	71	x				

Name	Age	M	T	W	Th	F
Akamai Group (Con't)						
Rolando Millan	68	x				
Camberto Sanchez	81	x				
Horace French	71	x				
Laverne Parics	70	x				
Harry Tlukaota	81	x				
David Martin	72	x				
Nori Hanaoka	68	x				

Nicole Cobleigh

From: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Sent: Monday, August 20, 2018 8:40 AM
To: Derek.Galey@lw.com; Nicole Cobleigh
Subject: FW: Carol Kimmelman Sports Complex Concerns/Comments Revised

Good Morning Derek and Nicole,

Please see below on comments from the scoping meeting.

Ryan Kristan, Architect
Project Manager
Los Angeles County Public Works
Office: (626) 300-3271

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From: Vega, Yvette <yvette.vega.281@my.csun.edu>
Sent: Wednesday, August 15, 2018 8:34 PM
To: Ryan Kristan (Consultant) <rkristan@dpw.lacounty.gov>
Subject: Carol Kimmelman Sports Complex Concerns/Comments Revised

Hello Mr. Kristan,

First off, thank you for coming to the city of Carson to present The Carol Kimmelman Center. I have been a resident of Carson for five years now and I attended the public scoping meeting on August 14, 2018.

I want to share with you the reason that I moved to my home in Carson, by Victoria Park. I moved to this location because of its neighborhood. We are a family oriented community. We respect the street that we live on and we understand that our children feel safe playing outside on the street. We love that the community uses Victoria Park for family sports events and for leisure. For these reasons, I am very concerned about the enormous facility that the LA County is proposing to be built in our area.

You see, I think that the idea and the vision for this complex is great. I just do not feel that this is the correct location for this venue. Mrs. Kimmelman taught in South Central Los Angeles, and to house this facility in Carson is just not ideal for the members of the greater Los Angeles areas.

This type of facility would be better off in closer proximity to the city of Los Angeles, which is the "heart of Los Angeles" as Mr. Kimmelman stated in his video interview. I am an educator myself and I can tell you that the communities of underserved youths would love a place like this. However, no parent would be OK with busing their child to Carson for them to be dropped off at school after dark only to have their child walk home in tough neighborhoods. Underserved youth parents are concerned with providing meals and a safe shelter over their childrens' heads. So, I do not see them commuting in rush hour traffic on the 110, 405, and 91 freeways to come to this center in Carson only to return to the congested freeways in the evenings. It is simply just not ideal.

On that note, I have concerns with traffic. One, people will use apps to find short cuts to the center and will eventually make our residential streets unsafe for children to play in. Two, if USTA will bus students in, what will the traffic be like? What will the smog/pollution quality be like in our neighborhoods? Can the LA County contact Wayz and other driving direction companies to not use our Victoria Park residential coordinates as a route to the complex?

Another concern that I have is in regards to the learning center. What type of learning center will it be? Who will be funding this center? How long will this center be funded for? I am concerned that funding will be short and that services

will not be provided and then that's when empty lots become a crime magnet. What will the county do to mitigate this? Will the county work with the city to ensure safety and peace in the Victoria Park Community?

Moreover, another concern that I have is with the aesthetics. What is the parking lot going to be like? Will it be a large 2-5 stories high type of structure? A flat lot? Will you charge for parking? You see, if the county charges for parking then people will park on surface streets and take up parking spots for park visitors and residents. How will the county mitigate this? Will the county work with the city of Carson to suggest solutions such as residential parking permits? Is this something that the City of Carson will need to deal with? Also, we have the Stubhub and when there are events, there is a lot of traffic and street parking gets taken up by the football event goers leaving no parking for park visitors.

Additionally, this new sports complex will have a 1,200 seating capacity. What is this intention for this venue? Is it because the Olympics will be coming and this is a way to get ready for them? This venue is taking away the golf course that gets used on a daily basis by our retired community members and others for tennis courts and soccer fields that will probably not be used because this is a football and basketball type of community. There are already tennis courts adjacent to the golf course that NEVER get used. Now the LA County thinks it's a great idea to build an enormous tennis court area? What does that say to our community golfers? It's a terrible thing to do, to take away a facility that is already in use for another one that will need kids and people to be transported into to be used? With a venue this large, what is the county going to do to ensure community safety? There will possibly be over a thousand center goers and that is a large number for the Victoria Park Community. Our children play on the streets and if there are these many people walking around and driving, it poses a threat to our children's safety.

Also, what will a facility of this magnitude do for the residents of Carson, especially those in the Victoria Park Community? Will it impact our home values in a negative way? Will our home values vanish? These are important concerns to be researched and addressed.

Lastly, when and how will all of these concerns be addressed and/or answered?

Thank you for your time,

Yvette Diaz
Education Specialist
M.S., Sp. Ed.
Victoria Park Community Resident

APPENDIX B

Lighting Study

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Carol Kimmelman Sports and Academic Campus Project
340 Martin Luther King Jr. Street
Carson, California

LIGHTING STUDY

January 25, 2019

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This Lighting Study by Francis Krahe & Associate Inc. analyzes the new lighting associated with the proposed Carol Kimmelman Sports and Academic Campus project ("Project") improvements at 340 Martin Luther King Jr. Street in Carson, California, including new lighting for buildings, signage, outdoor soccer, tennis, car parking and site access roads. The Project site is located on approximately 87 acres of the existing approximately 171-acre Victoria Golf Course property and is bounded by Martin Luther King Jr. Street to the north, South Avalon Boulevard to the east, and the balance of the Victoria Golf Course site to the south and west. There are existing residential use properties to the east of the Project site east property line along South Avalon Boulevard which face Dunbrooke Avenue, and to the north of Victoria Park, north of the Project north property line. There is also an active, private Goodyear Blimp Airfield further to the west of the Project site at South Main Street.



Figure 1: Project Site and Surrounding Properties

This Study reviews the parameters that affect Light Trespass or Glare (each as defined below) at adjacent properties in the vicinity of the Project, reviews the applicable lighting metrics and regulations pertaining to artificial lighting, examines the existing lighting conditions within and surrounding the Project, and evaluates the Project's proposed building and site lighting (Project Lighting) and illuminated signs (Signs Lighting) to identify potential environmental impacts on surrounding light sensitive use properties.

The methods of analysis utilized for this Study are based upon the recommended practices established by the Illuminating Engineering Society of North America (IESNA) for the practice of illumination engineering design and application, and the actual measurements of light sources and illuminated surfaces. The IESNA 10th Edition Handbook is the current reference published by IESNA, which supersedes the 9th Edition IESNA Handbook and various Recommended Practice (RP) References published by IESNA prior to 2011.

1. Summary

This Study reviews the proposed Project (as described herein as Appendix A) with respect to Light Trespass and Glare at adjacent light sensitive use properties near the Project site. Adjacent Residential properties are identified as the most light sensitive use sites due to their close proximity to the Project and possible direct view of the Project Lighting and Signs Lighting. Light intensity diminishes rapidly in relation to distance (see Inverse Square Law page 8). Therefore, more distant sensitive site locations will receive much lower Light Trespass illuminance and or luminance, and will therefore be less affected by the Project. There is no Light Trespass or Glare threshold for commercial use properties, which are not considered light or glare-sensitive receptors.

Exterior lighting impact issues are focused around two key subjects: Light Trespass and Glare. These two technical terms are defined by the Illuminating Engineering Society of North America (IESNA) as follows:

- *Light Trespass*[1] is the light that falls on a property but originates on an adjacent property. Light Trespass is measured in terms of illuminance (foot-candles or metric units lux), and can be measured at any point and in any direction. Where Light Trespass is evaluated the illuminance is measured perpendicular to the source of light, toward the source of light, at the property line, or the location where light may intrude, such as a residential window or balcony.

- *Glare*[2] occurs when either the luminance is too high or the range of brightness in a visual field is too large. A bright light source, such as a street light, viewed against a dark sky may be uncomfortable to look at. Glare is evaluated by measuring the luminance (footlamberts or metric units candelas/m^2) at the source of light, such as a digital display, in comparison to the surrounding adjacent luminance. The term which describes the extent of Glare at an observer position for a view is referred to as contrast, which is determined by the variation of luminance within the field of view, or the ratio of peak luminance to the average luminance. "High," "Medium," and "Low" contrast are terms used to describe contrast ratios: contrast ratios greater than 30:1, between 10:1 and 30:1, and below 10:1, respectively. Contrast ratios above 30:1 are generally uncomfortable for the human eye to perceive. Any source luminance that is more than 50 times the adjacent background will be viewed as prominent, and may be viewed as distracting. For driver's visibility, the range of acceptable glare is higher, due to the use of head lights for traffic visibility and the range of variations in background luminance. For driver's visibility the glare threshold is defined by the California Vehicle code as a maximum luminance value relative to the drivers' field of vision.

Light Trespass is evaluated at night. Glare may occur either during the day or night.

Lighting within the Project is described by the Lighting Concept Design Documents included as Appendix A of this Study and by the Signs Lighting Concept Design Documents included as Appendix B of this Study. The Project Lighting and Signs Lighting includes all exterior and interior lighting that may produce a new potentially significant source of light or glare at adjacent properties.

The Project Lighting includes light for safety and use of the property, including exterior and interior lighting, sports lighting for soccer fields and tennis courts. The Project Lighting conceptual design is included in this Study as Appendix A. These conceptual designs are analyzed within this Study, including evaluation of the Project's Lighting under the 2016 Los Angeles County Building Code and the applicable provisions of the 2016 California Energy Code - California Code of Regulations, Title 24, Part 6 and Part 11 (CEC), which limit light trespass and energy use for lighting including:

- Light trespass maximum of 0.74 fc (0.8 lux) as per CEC Lighting Zone 3, and IESNA Table 26.4 and Table 26.5, maximum energy use for outdoor lighting (CEC Section 140.), and green building standards that limit brightness and light spill (Section 5.106.8).

[1] *IESNA Handbook, 10th Edition, 19.3: Light Pollution and Trespass, page 19.7*

[2] *IESNA Handbook, 10th Edition, 4.10: Glare, page 4.25*

- 2016 CEC California Green Building Standards Code Section 5.106.8, including the applicable backlight, uplight and glare requirements which limit brightness of luminaires and prevents light spill and light pollution.

This Study demonstrates the Light Trespass from the Project Lighting at the adjacent light sensitive use properties would be below the 0.74 footcandles (fc) standard as defined by the CEC Lighting Zone 3 and the Illuminating Engineering Society of North America (IESNA) (included herein as Appendix C).

Furthermore, the Project Lighting is evaluated with respect to Glare visible at adjacent light sensitive use properties or roadways.

This Study analyzes the Glare from the Project Lighting at light sensitive use properties at night by calculating the contrast ratio, which compares the maximum luminance to the existing average luminance measured at the monitoring sites. The luminance is estimated to be less than 100 cd/m^2 and the calculated contrast ratios are less than 30:1 as visible from a field of view from light sensitive uses, which indicates the Project would not create a new glare condition at adjacent light sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum luminance within driver's field of view for both day and night. This Study confirms the Project Lighting would not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

This Study analyzes the Project potential impacts relating to the Project Signs Lighting scope components, as described in Appendix B of this Study. This Study includes the following illumination levels for Signs Lighting for purposes of this analysis:

- Light Trespass illuminance will not exceed 0.74 fc at the adjacent sensitive use properties
- Project Digital Sign DS-1 will not exceed 300 cd/m^2 (all white) at nighttime, from sunset until after sunrise, and will not exceed 7000 cd/m^2 (all white) during daytime, from 30 minutes after sunrise until 30 minutes before sunset.
- Project Building Identification Signs and Entry Monument Signs will not exceed 100 cd/m^2 (all white) from sunset until after sunrise.
- Project Digital Signs will transition smoothly from daytime to nighttime luminance and vice versa over a twenty minute time period.

This Study demonstrates the Light Trespass from the Sign Lighting at the adjacent sensitive use properties is below the 0.74 footcandles (fc) threshold as defined by the California Energy Code. There is no Light Trespass threshold for commercial use properties, which are not considered light or glare-sensitive receptors.

Furthermore, the Sign Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Signs Lighting with a maximum luminance of 7000 cd/m^2 during the day and 300 cd/m^2 at night with all signs operating at all white.

This Study analyzes the Glare from the Sign Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Sign luminance to the existing average luminance measured at the residential properties. At 7000 cd/m^2 during the day and 300 cd/m^2 at night the calculated contrast ratio does not exceed 30:1 and therefore this analysis indicates the Sign Lighting will not create a new Glare condition at adjacent sensitive use properties.

The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within drivers field of view for both day and night. This Study confirms the Sign Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Signs Lighting will not create a new source of Light Trespass or Glare.

Therefore, the results of this Study indicate the Project Lighting and Project Signs Lighting will not create a significant new source of Light Trespass or Glare and lighting impacts would be less than significant for this Project.

2. Project Description

The Project consists of a new sports and academic campus, including a Learning Center, Tennis Center and Soccer Center, and other recreational amenities. The Project site consists of approximately 87 acres of the existing 171-acre Victoria Golf Course property at 340 Martin Luther King Jr. Street in the City of Carson, California. The Project site property is bounded by Martin Luther King Jr. Street to the north, South Avalon Boulevard to the east, and the balance of the Victoria Golf Course to the south and to the west. There are existing residential use properties to the east of the Project site east property line along S Avalon Boulevard which face Dunbrooke Avenue, and to the north of Victoria Park, north of the Project north property line. There is also an active, private Goodyear Blimp airfield further to the west of the Project site at South Main Street.

The Project includes light sources to provide illumination for nighttime use of the property, including building code required lighting for safety and security, as well as lighting for occupants use and enjoyment of the sports facilities including lighting for approximately half of the ten proposed outdoor soccer/athletic fields, lighting for all proposed tennis courts, lighting for on site roads and parking, and illuminated signage.

This analysis represents a conservative evaluation of the Project potential for offsite Light Trespass Illuminance and Glare.

3. Glossary of Lighting Terminology

Discussions of lighting issues include precise definitions, descriptions or terminology of the specific lighting technical parameters. The following glossary summarizes explanations of the technical lighting terms utilized in this Study and the related practice standards to facilitate discussion of these issues. The following technical terms are used in this Study.

Brightness: The magnitude of sensation that results from viewing surfaces from which light comes to the eye. This sensation is determined partly by the measurable luminance of the source and partly by the conditions of observation (Context), such as the state of adaptation of the eye. For example, very bright lamps at night appear dim during the day, because the eye adapts to the higher brightness of daylight.

Candela: Measure of light energy from a source at a specific standard angle and distance. Candela (cd) is a convenient measure to evaluate output of light from a lamp or light fixture in terms of both the intensity of light and the direction of travel of the light energy away from the source.

Contrast: Calculated evaluation of high, medium and low contrast of visible light sources or surfaces within the property by a ratio of luminance. Contrast is the ratio of one surface luminance to a second surface luminance or to the field of view. Contrast exceeding 30 to 1 are usually deemed uncomfortable; 10 to 1 are clearly visible; and less than 3 to 1 appear to be equal.

Fully Shielded: A lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the Luminaire, is projected below the horizontal as determined by photometric test or certified by the manufacturer. Any structural part of the light fixture providing this shielding must be permanently affixed. In other words, no light shines above the horizontal from any part of the fixture.

Glare: Glare is visual discomfort experienced from high luminance or high range of luminance. For exterior environments at night, glare occurs when the range of

luminance in a visual field is too large. The light energy incident at a point is measured by a scale of footcandles or lux, and is described in the technical term Illuminance. This incident light is not visible to the eye until it is reflected from a surface, such as pavement, wall, dust in the atmosphere or the surface of a light bulb. The visible brightness of a surface is measured in footlamberts (or metric equivalent candelas per square meter) and is described by the term Luminance.

The human eye processes brightness variations across a very broad spectrum of intensities. The range of brightness generated by direct noon sun versus a moonlight evening is over 5000 to 1. Human eyes are capable of accommodating to this range of intensities given adequate time to adjust. However, the eye cannot process brightness ratios of more than 30 to 1 within a view without discomfort. See IESNA 10th Edition Handbook, Section 4.10.1, Discomfort Glare and Section 10.9.2 Calculating Glare.

For the purpose of this analysis, brightness of light sources may be described subjectively by the following criteria:

High Contrast Conditions: View of light fixture emitting surface, such as a lens, reflector, or lamp, where brightness contrast ratio exceeds 30 to 1 (source Luminance to background Luminance ratio in footlamberts).

Medium Contrast Conditions: Brightly lighted surfaces where contrast ratio exceeds 10 to 1, but is less than 30 to 1 (lighted surface Luminance to background Luminance ratio in footlamberts).

Low Contrast Conditions: Illuminated surfaces where contrast ratio exceeds 3 to 1, but less than 10 to 1 (source Luminance to background Luminance ratio in footlamberts).

Illuminance: Illuminance is the means of evaluating the density of Luminous Flux. Illuminance indicates the amount of Luminous Flux from a light source falling on a given area. Illuminance is measured in footcandles (fc) which is the lumens per square foot, or Lux (lumens per square meter). Illuminance need not necessarily be related to a real surface since it may be measured at any point within a space. Illuminance is determined from the Luminous intensity of the light source. Illuminance of a point source decreases with the square of the distance from the light source (see Inverse Square Law definition).

Horizontal Illuminance: Illuminance incident upon a horizontal plane. The orientation of the illuminance meter or calculation point will be 180° from Nadir.

Vertical Illuminance: Illuminance incident upon a vertical plane. The orientation of the illuminance meter or calculation point will be 90° from Nadir.

Inverse Square Law: In physics, an inverse-square law is any physical law stating that a specified physical quantity or intensity is inversely proportional to the square of the distance from the source of that physical quantity. The fundamental cause for this relationship can be understood as geometric dilution corresponding to point-source radiation

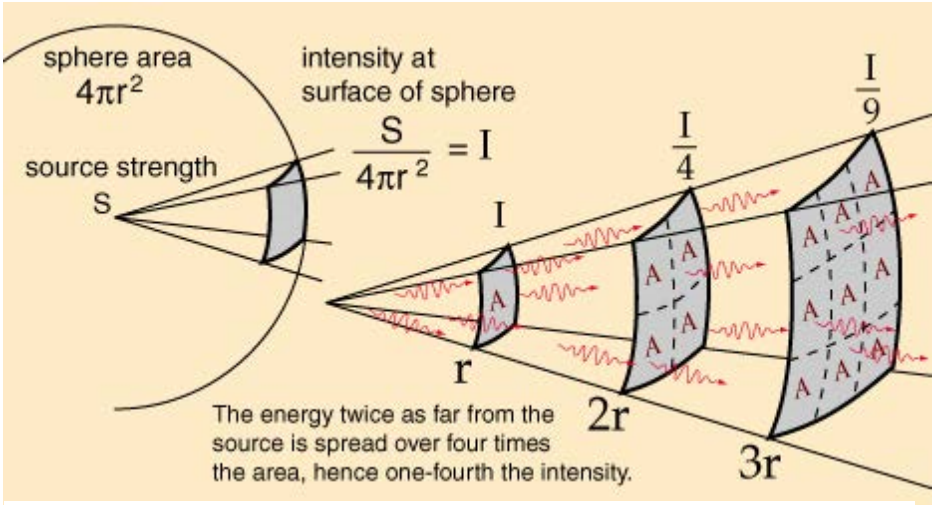

Figure 2: Inverse square law diagram (hyperphysics.phy-ast.gsu.edu)

into three-dimensional space (see Figure 2). The divergence of a vector field which is the resultant of radial inverse-square law fields with respect to one or more sources is everywhere proportional to the strength of the local sources, and hence zero outside sources. Newton's law of universal gravitation follows an inverse-square law, as do the effects of electric, magnetic, light, sound, and radiation phenomena. Thus, Illuminance decreases with the square of the distance from the light source.

Output Direction: Luminaires for general lighting are classified in accordance with the percentages of total luminaire output emitted above and below horizontal. The light distribution curves may take many forms within the limits of upward and downward distribution, depending upon the type of light and the design of the luminaire.

Lighting Array: An installation of multiple light sources or lamps where the distance between each lamp or light source within the Lighting Array is less than 5 feet on center in any direction from any other source.

Light Source: Device which emits light energy from an electric power source.

Light Trespass: Electric light from subject property incident onto adjacent properties, measured in footcandles or lux, usually analyzed by measurement at or near the adjacent property line.

Lighting Zone (LZ): Defined by IESNA and summarized in Table 26.4 in the Handbook and adopted by CALGreen.

Lighting Zone LZ2: Outdoor areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting is not uniform or consistent. Lighting is generally desired for safety, security and/or convenience.

Lighting Zone LZ3: Outdoor areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security and/or convenience.

Lighting Zone LZ4:	Outdoor areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally desired for safety, security and/or convenience.
Luminaire:	A complete lighting unit consisting of a lamp or lamps and ballast(s) (when applicable) together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply. Also referred to as a Light Fixture.
Luminance:	Luminance is a measure of emissive or reflected light from a specific surface in a specific direction over a standard area. Luminance is measured in footlamberts (fL) (Candela per square foot) or cd/m^2 (Candela per square meter). 1fL = 3.43 cd/m^2. Whereas Illuminance indicates the amount of Luminous Flux falling on a given surface, Luminance describes the brightness of an illuminated or luminous surface. Luminance is defined as the ratio of luminous intensity of a surface (Candela) to the projected area of this surface (m^2 or ft^2).
Luminous Flux:	Mean value of total Candelas produced by a light source. Luminous Flux describes the total amount of light emitted by a light source. The unit for measuring Luminous Flux is Lumen (lm). This radiation could basically be measured or expressed in watts. This does not, however, describe the optical effect of a light source adequately, since the varying spectral sensitivity of the eye is not taken into account. To include the spectral sensitivity of the eye the Luminous Flux is measured in lumen. Radiant Flux or 1 W emitted at the peak of the spectral sensitivity (in the photopic range at 555 nanometers produces a Luminous Flux of 683 lumen). The unit of lumen does not define direction.
Monitoring Sites:	Monitoring Sites are locations selected for observation and field lighting measurements to evaluate the views to the Project from adjacent sensitive use properties and to determine the extent and intensity of existing light sources within and surrounding the Project. The Monitoring Sites are within the public right of way, and may be adjacent to sensitive use sites. These locations are representative of the view to the Project from the vicinity of the sensitive sites surrounding the Project to the north, south, east and west. Figure 5 below illustrates the Monitoring Site locations.
Skyglow:	Skyglow is the description of luminous atmospheric background and results from both natural and human made conditions. Natural causes of skyglow include sunlight reflected from the surface of the earth and moon, sunlight illuminating the upper atmosphere, and visible illumination from other interplanetary sources. Human made causes of skyglow include electric light that is emitted directly upward into the sky (Uplight), or reflected off of the ground.

4. Review of Lighting Regulations & Reference Standards

Exterior lighting is regulated throughout California by the state energy and building codes and local municipal codes. Pertinent lighting sections are summarized and discussed for the County of Los Angeles, California Building Code, the State of California Green Building Code, and the California Energy Code (CalGreen). Reference standards include model lighting ordinances provided by the Illuminating Engineering Society of North America (IESNA) and the International Dark Sky Organization, ASHRAE 90-75, and the U.S. Green Building Council. The lighting standards summarized below balance the requirements of property owners and the public for sufficient

brightness and flexibility for the use and safety of property, with minimizing the off-site negative effects of Light Trespass and Glare.

4.1 County of Los Angeles Building Code (Title 26)

The County of Los Angeles Building Code (LABC) regulates lighting with respect to building lighting, transportation, and street lighting. The County also enforces the building code requirements of the Los Angeles County Electrical Code 2017 (Title 27), the California Building Code, the California Green Building Standards Code (CALGreen), and the California Electrical Code. The LABC does not define maximum light trespass illuminance for all properties within the County.

4.2 California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The following components of Title 24 include standards related to lighting:

California Energy Code (Title 24, Part 6)

The California Energy Code (CEC) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems (see Appendix C herein), with the aim of reducing energy consumption through efficient and effective use of lighting equipment.

California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards Code, which is Part 11 of Title 24, is commonly referred to as the CALGreen Code. Paragraph 5.1106.8, Light pollution reduction, requires that non-residential outdoor lighting comply with the minimum requirements in the CEC for Lighting Zones 1–4 as defined in Chapter 10 of the California Administrative Code as noted above or an applicable local ordinance if more stringent.

4.3 Lighting Zone Designation LZ3

The Project site and surrounding properties are urban, mixed use, commercial and residential zones with extensive nighttime use, including the existing use on the Project site of a night illuminated golf driving range and practice facility and related parking. The California Energy Code (CEC) includes designations for Lighting Zones (LZ) 1 through 4, included below in Appendix C, which correspond to the Light Trespass recommendations within the IESNA 10th Edition Handbook, Table 26.4, included herein Appendix D and E.

All urban areas within California are designated Lighting Zone 3 as default under the CEC, which limits the Light Trespass to 8 lux (0.74 footcandles). Per the CEC, California Building Energy Efficiency Standards, Section 10-114, page 40, 41, the designations for outdoor lighting zones in urban areas are as follows:

"The default for urban areas, as defined by the U.S. Census Bureau, is Lighting Zone 3. Local AHJs (Authorities Having Jurisdiction) may designate areas to Lighting Zone 4 for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels."

The existing conditions within and surrounding the Project site and along South Avalon Boulevard and I-405 Freeway are consistent with the definition of Lighting Zone 3 noted above. In addition, the IESNA defines Lighting Zone 3 as:

"areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform or continuous."

IESNA Table 26.5, lists a Pre-curfew 8 Lux (0.74 footcandles) maximum at the location where trespass is under review for Zone 3. The CEC standard is well defined and supported by the IESNA and ASHRAE, and other independent lighting organizations such as the International Dark Sky Organization and U.S. Green Building Council.

4.4 California Vehicle Code, Division 11. Rules of the Road

Chapter 2, Article 3 of the California Vehicle Code stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.

ARTICLE 3. Offenses Relating to Traffic Devices [21450 - 21468] (Article 3 enacted by Stats. 1959, Ch. 3.), Section 21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A light source shall be considered vision impairing when its brilliance exceeds the values listed below.

The brightness reading of an objectionable light source shall be measured with a 1-1/2 degree photoelectric brightness meter placed at the driver's point of view. The maximum measured brightness of the light source within 10 degrees from the driver's normal field of view shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's field of view and the light source.

4.5 IESNA Recommended Practices

The Illuminating Engineering Society of North America (IESNA) recommends illumination standards for a wide range of building and development types. These recommendations are widely recognized and accepted as best practices and are therefore a consistent predictor of the type and direction of illumination for any given building type. For all areas not stipulated by the regulatory building code, municipal code or specifically defined requirements, the IESNA standards are used as the basis for establishing the amount and direction of light for the Project.

The IESNA 10th Edition Lighting Handbook defines Outdoor Lighting Zones relative to a range of human activity. Table 26.4, Nighttime Outdoor Lighting Zone Definitions, included in Appendix D of this Study, establishes the Zone designation for a range of existing lighting conditions, from low or no existing lighting to high light levels in urban areas. Table 26.4 is referenced by the CEC as noted above in relation to allowable energy use for outdoor lighting. In addition, the IESNA 10th Edition Lighting Handbook defines Recommended Light Trespass Limits in Table 26.5, included in the Appendix E hereto, relative to the Outdoor Lighting Zones. The Recommended Light Trespass Illuminance limits describe the maximum Light Trespass values in Lux at the location where trespass is under review.

The existing conditions surrounding the Project site are best described as Lighting Zone 3. IESNA Table 26.5, lists a Pre-curfew 8 Lux (0.74 footcandles) maximum at the location where trespass is under review for Zone 3.

5. Significance Threshold

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations, Sections 15000–15387) provides a set of sample questions to evaluate impacts with regard to aesthetics, including light and glare. The question that pertains to light and glare is as follows:

Would the project:

- Create a new source of substantial light and glare which would adversely affect day or nighttime views in the area?

In the context of this question from Appendix G of the CEQA Guidelines, the determination of significance in this Study takes into account the following factors:

- The change in ambient nighttime levels as a result of Project sources; and
- The extent to which project lighting would spill off the Project site and affect adjacent residential zoned properties.

Specifically, this Study evaluated that the Project would create a significant impact with regard to artificial light or glare if:

- The Project Light Trespass illuminance exceeds 0.74 foot-candles at the property line of a residential zoned property.
- The Project creates Glare with new high contrast conditions, with contrast ratio greater than 30:1, visible from a field of view from a residentially zoned property.

In addition, based on the California Vehicle Code section discussed above, the Project would create a significant impact with regard to artificial light or glare effects on drivers of motor vehicles if:

- The maximum measured brightness of the light source within 10 degrees from the driver's normal field of view were more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's field of view and the light source.[3]

6. Methodology

6.1 Existing Conditions Procedures

Existing conditions lighting observations were conducted following recommended practice procedures defined by the IESNA in RP-33-00 Lighting for Outdoor Environments, TM10-00 Addressing Obtrusive Light (Urban Sky Glow and Light Trespass) in Conjunction with Roadway Lighting, and TM11-00 Light Trespass: Research, Results and Recommendations. Field illuminance and luminance measurements were conducted to accurately document all existing incident and visible light at each Monitoring Site location. Incident light can be understood as a vector of luminous flux moving through space. As the vector (light) is incident upon a surface, the intensity of the resulting illuminance will vary depending upon the relative orientation of the vector to the surface. The greatest illuminance will result when the surface and vector are perpendicular. The least illuminance will result when the surface and vector are parallel. In the field conditions, where there are multiple sources of light originating from varied positions, vertical illuminance measurements are recorded at 3 feet above grade, with the photosensor facing the Project as per IESNA standards. These measurements document the total vertical illuminance received at a Monitoring Site as well as the direction and intensity of light converging on the Monitoring Site from the direction of the Project site. The majority of the Monitoring Sites are located at a long distance away from the Project site, greater than 100 feet as noted in Section 7 below. Under these conditions, there is little difference between the vertical and perpendicular plane, and the vertical plane analysis that is conducted in this Study would be equal to or greater than the measured luminance from a precisely perpendicular plane analysis. Therefore, this study utilizes a vertical illuminance analysis. The existing Illuminance is measured with a Minolta Illuminance meter.



Figure 3: Minolta LS-100 meter

The existing luminance is measured from each Monitoring Site to light sources and surfaces within the field of view toward the Project site from that Monitoring Site. This existing condition luminance data is measured with a Minolta

[3] *The driver's field of view from the center of the roadway plus 10 degrees.*

LS-100 Luminance meter with procedures consistent with best practices for field measurement of luminance as per IESNA standards. The LS-100 meter utilized by Francis Krahe & Associates, Inc. reports luminance data in either candelas per square meter or footlamberts (fL). All existing luminance data measured and reported in this Study are recorded as cd/m^2.

6.2 Project Analysis

The analysis of the Project includes evaluation of the illuminance Light Trespass from the Project at adjacent residential properties, and an evaluation of Glare from the Project visible at residential properties or at adjacent roadways.

This Study presents a conservative analysis with respect to Light Trespass and Glare. The Project is evaluated with a configuration of the maximum permissible lights that are within the limits of the California Building Code. This Study evaluates the Project Lighting Concept identified in Appendix A and the Project Signs Lighting Concept as identified in Appendix B.

a. Project Light Trespass Analysis

Light Trespass illuminance is calculated at the location where lighting is under review through the illumination modeling software program AGI32. This software utilizes the 3-dimensional architectural computer model, including the lighting fixtures types and locations, and Project lit signs and locations, to generate an accurate prediction of future illuminance. Light Trespass illuminance is evaluated with respect to vertical illuminance at the locations where lighting is under review.[4]



Figure 4: Project Site and Vertical Calculation Planes locations

To evaluate Light Trespass at the nearest light sensitive use properties, the illuminance from the Project is calculated at the review location within a vertical plane at the sensitive use property line, extending from grade to a maximum

[4] *See Note 1, above.*

viewing elevation above grade (to the east and north of the Project Site at 60 feet above grade and to the south of the Project Site at 100 feet above grade). The calculation plane simulates the illumination (fc) captured by light meters. The calculated illuminance data is presented at 10 feet on center. Figure 4 below illustrates the locations where the lighting is under review and where the vertical illuminance is calculated to evaluate Light Trespass (e.g., VPE1 represents the length of the eastern boundary of Avalon Boulevard).

The vertical calculation planes analyze the lighting at the nearest residential use property line adjacent to the Project property line, which will be greater than the illuminance at any location more distant from the Project. Incident light (fc) from a source degrades in proportion to the inverse square of the distance from the source to the location where lighting is under review. The illuminance E_v (fc) incident at any given distance D (ft) from an illuminated surface S (ft^2) with uniform surface luminance of L (cd/m^2) is calculated by the following formula:

$$E_v = \frac{L \times S}{10.76 \times D^2}$$

This formula illustrates the reduction in illuminance at any location as the distance increases from a light source to the location where lighting is under review. More distant sensitive use properties will receive less light from the Project due to the increased distance. Therefore, lighting from the Project will produce a less significant Light Trespass illuminance impact on sensitive use properties more distant from the Project property line. Similarly, light sources further within the Project site will produce less significant Light Trespass impact on sensitive use properties than light sources at the Project property line.

b. Project Glare Analysis

Glare from the Project is evaluated at light sensitive use properties and for drivers on adjacent streets. Project luminance is evaluated by the contrast ratio, which equals the maximum Project luminance divided by the measured average existing luminance within the field of view at the Monitoring Sites identified in the field survey of existing conditions (see Section 7 below). Contrast ratios greater than 30:1 are considered potential glare conditions.

The potential roadway glare impacts are analyzed with respect to the Project luminance as compared to the California Vehicle Code requirements for both night and day conditions at the adjacent roadways identified in Figure 5 below.

The roadway glare analysis includes evaluation of the view angle from the driver's line of sight to the Project to determine the visibility of the lighting within the Project site, and evaluates the luminance of the Project from adjacent roadways near the Project site.

7. Project Existing Conditions

The Project site is bounded by Martin Luther King Jr. Street to the north (formerly 192nd Street), South Avalon Boulevard to the east, and the balance of the Victoria Golf Course site to the south and west. There are existing residential use properties to the east of the Project site east property line along S Avalon Boulevard which face Dunbrooke Avenue, and to the north of Victoria Park, north of the Project north property line. There is also an active, private Goodyear Blimp airfield to the west of the Project site at South Main Street.

The existing lighting conditions within and surrounding the Project include street lights, exterior parking lot light, exterior lighting utilized for security and safety, athletic lights, commercial illuminated signs within adjacent buildings, and landscape lighting at adjacent residences.

The distance to adjacent residential properties varies considerably. Several residential properties are approximately 150 feet from the Project east property line.

The existing active Goodyear Blimp airfield to the west of the Project site is not considered a sensitive use site, since it is not a residential use, and is not adversely affected by increased night illumination from the Project.

7.1 Existing Conditions Monitoring Sites

Monitoring sites are utilized to describe and evaluate the existing lighting conditions at and surrounding the Project site to determine the maximum potential impacts that may result from Light Trespass or Glare onto adjacent sensitive sites surrounding the Project site. All Monitoring Site locations are within close proximity of the Project and have views of the Project Site. Monitoring Sites may be located adjacent to existing residential properties.

The following criteria were used to select potential Monitoring Site locations:

Project Light Visibility – Monitoring sites were analyzed that provide direct view of the areas of greatest potential light intensity from the Project.

Proximity – Monitoring sites at the least distance to the Project were analyzed. These locations were selected because light intensity decreases exponentially with distance. Locations at a greater distance will experience less light intensity than nearby locations.

Figure 5 shows the Project's location, the Monitoring Site locations and the properties surrounding the Project. The Project is shaded blue. Residential properties are shaded red. Monitoring Site locations were selected for observation and field lighting measurements to evaluate the views to the Project from adjacent residential properties and to determine the extent and intensity of existing light sources within and surrounding the Project. The Monitoring Sites are within the public right of way, adjacent to residences or at the Project property line. These locations are representative of the view to the Project from the vicinity of the residences surrounding the Project to the north, east, and southeast.



Figure 5: Project Site and Monitoring Site locations

Figure 5 illustrates the following Monitoring Site locations:

Monitoring Site ME1: Monitoring Site ME1 is located along S Avalon Blvd behind the residential property located at 19925 Dunbrooke Ave, north of E Turmont St, to evaluate the view to the

Project east and south property line. The distance to the Project property line is approximately 150 feet.

Monitoring Site ME2: Monitoring Site ME2 is located on SE corner of Dunbrooke Ave and E Elsmere Dr at the residential property of 19602 Dunbrooke Ave, to evaluate the Project east property line. The distance to the Project property line is approximately 300 feet.

Monitoring Site ME3: Monitoring Site ME3 is located along S Avalon Blvd behind the residential property located at 19327 Dunbrooke Ave, north of E Elsmere Dr, to evaluate the east property line. The distance to the Project property line is approximately 150 feet.

Monitoring Site MN1: Monitoring Site MN1 is located at the existing north parking lot, to evaluate the Project north property line. The distance to the Project property line is approximately 50 feet.

Monitoring Site MS1: Monitoring Site MS1 is located on the south-side of the Dominguez Channel between S Main St and E Del Amo Blvd to evaluate the Project southwest property line. The distance to the Project property line is approximately 1,000 feet.

7.2 Criteria

As established in Section 1.3, the following factors were used to assess the existing conditions at each Monitoring Site:

Table 1. Existing Conditions Lighting Criteria

Criteria	Metric	Procedure
Light Trespass - Illuminance	Measured illuminance (footcandle) documented at each Monitoring Site	Horizontal and vertical illuminance measurements at each Monitoring Site with Minolta illuminance meter.
Glare – Contrast Ratio	Observed existing conditions. Measured luminance at each Monitoring Site	Observed and recorded conditions with respect to the view to the Property from the Monitoring Site in terms of Project visibility within the field of view from the Monitoring, including measurement of visible and prominent light sources, lighted surfaces, and illuminated signs.

7.3 Monitoring Site Survey Data

The observations and measurement of existing lighting conditions within and surrounding the Property are summarized below in relation to the evaluation factors established in Section 5, Significance Threshold:

Illuminance: The Illuminance listed in Table 2, below, summarize the measured Illuminance at the Monitoring Sites. The measured illuminance is consistent with an urban lighting condition, with relatively higher illuminance at the street and sidewalk within the public right of way and nearby commercial properties, and lower illuminance within the residential properties, but sufficient light for safety and security. The existing Property includes lighting for the existing parking lot, buildings and driving range. Commercial properties and roadways to the south, east, and west contribute to a relatively bright night environment.

Measured illuminance greater than 3.0 fc is evaluated as high illuminance, from 1.0 fc to 3.0 fc is evaluated as medium illuminance, and from 1.0 fc or less as low illuminance.

The highest existing horizontal illuminance level was recorded at Monitoring Site at ME3 with 0.27 fc, while the lowest horizontal illuminance was recorded at Monitoring Site MS1 at 0.04 fc. The highest existing vertical

illuminance level was recorded at Monitoring Site ME1 at 0.93 fc, while the lowest vertical illuminance was recorded at Monitoring Site MS1 at 0.03 fc.

Table 2. Measured Illuminance (fc) at Monitoring Sites

Monitoring Site	Illuminance (fc)		Description	Evaluation
	Horizontal	Vertical		
ME1	0.21	0.93	Measured at 19925 Dunbrooke Ave, south of E Elsmere Dr	Low horizontal and vertical illuminance
ME2	0.11	0.18	Measured at 19602 Dunbrooke Ave, SE corner of Dunbrooke Ave and E Elsmere Dr	Low horizontal and vertical illuminance
ME3	0.27	0.71	Measured at 19327 Dunbrooke Ave, north of E Elsmere Dr	Low horizontal and vertical illuminance
MN1	0.11	0.66	Measured at Project site boundary on MLK Jr St	Low horizontal and vertical illuminance
MS1	0.04	0.03	Measured at south of the Dominguez Channel Trail between S Main St and E Del Amo Blvd	Low horizontal and vertical illuminance

Contrast/Glare: The evaluation of High, Medium and Low Contrast describes the perception of how bright a visible object appears in comparison to the surrounding objects within any given field of view. The "luminance ratio" is the ratio of the highest Measured Luminance as compared to the Luminance within the field of view visible at an observer position. This ratio is referred to as "contrast", and is determined by the variation of luminance. "High," "Medium," and "Low" contrast are terms used to describe effect of the contrast ratios (the ratio of peak measured luminance to the average within a field of view) of greater than 30:1, between 10:1 and 30:1, and below 10:1, respectively. Luminance contrast ratios above 30:1 are generally uncomfortable for the human eye to perceive. High Contrast indicates a potential Glare condition.

Table 3: Measured Luminance, (cd/m^2) at Monitoring Sites

Monitoring Site	Luminance (cd/m^2)		Contrast Ratio (Max / Average)	Description	Evaluation
	Average	Maximum			
ME1	28.3	583.0	20.6	Measured at 19925 Dunbrooke Ave, south of E Elsmere Dr	Medium average luminance, medium contrast
ME2	4.2	82.0	19.6	Measured at 19602 Dunbrooke Ave, SE corner of Dunbrooke Ave and E Elsmere Dr	Low average luminance, medium contrast
ME3	4.2	80.4	19.2	Measured at 19327 Dunbrooke Ave, north of E Elsmere Dr	Low average luminance, medium contrast
MN1	331.9	6765	20.4	Measured at Project site boundary at MLK Jr St	High average luminance, medium contrast
MS1	10.6	99.0	9.3	Measured at south of the Dominguez Channel Trail between S Main St and E Del Amo Blvd	Medium average luminance, low contrast

The existing Project site is a golf course with light poles at portions of the golf course and at parking and roadways. The site is well illuminated in portions of the golf course with many bright light sources and illuminated surfaces visible from the Monitoring Sites. The measured luminance recorded at the Monitoring Sites within the view to the Project includes prominent, high brightness light sources and illuminated surfaces, such as street lights, golf course light poles, and flood lighted buildings, as well as lower brightness surfaces such as sidewalks and un-illuminated walls or landscape areas. The range of recorded luminance is summarized in Table 3.

The observations at each Monitoring Site are identified in Section 7.3a through 7.3e below, including qualitative descriptions of the existing conditions. The qualitative summary includes notations regarding the brightness of visible light sources and surrounding illuminated surfaces within the field of view to the Project from the Monitoring Sites and the visibility of the Project within the field of view.

The highest measured average luminance was recorded at Monitoring Site at MN1 at 331.9 cd/m^2, while the lowest measured average luminance was recorded at Monitoring Site ME2 at 4.2 cd/m^2. The highest measured maximum luminance was recorded at Monitoring Site MN1 at 6765 cd/m^2, while the lowest measured maximum luminance was recorded at Monitoring Site ME3 at 80.4 cd/m^2. The calculated contrast ratio for Monitoring Sites ME1, ME2, ME3 and MN1 is medium contrast, less than 30:1. The calculated contrast ratio for Monitoring Sites MS1 is low contrast, less than 10:1.

a. Monitoring Site ME1:

Monitoring Site ME1 is located along South Avalon Blvd behind the residential property located at 19925 Dunbrooke Ave, north of East Turmont Street, to evaluate the Project east and south property line. The distance to the Project property line is approximately 150 feet. Street lighting along S Avalon Boulevard is visible in the foreground. Sports lighting poles are visible in the distance and contribute to the general illumination and brightness.



Figure 6: ME1 June 27, 2018, 2:30 PM



Figure 7: ME1 June 26, 2018, 9:30 PM

b. Monitoring Site ME2:

Monitoring Site ME2 is located on the south east corner of the Dunbrooke Avenue and E Elsmere Drive intersection at the residential property 19602 Dunbrooke Ave, to evaluate the Project east property line. The distance to the Project property line is approximately 300 feet. Street lighting along S Avalon Boulevard is visible in the foreground. Skyglow from commercial properties to the west is visible in the distance.



Figure 8: ME2 June 27, 2018, 2:30 PM



Figure 9: ME2 June 26, 2018 9:30 AM

c. Monitoring Site ME3:

Monitoring Site ME3 is located along the S Avalon Blvd east right of way behind the residential property located at 19327 Dunbrooke Ave, north of East Elsmere Dr, to evaluate the Project east property line. The distance to the Project property line is approximately 150 feet. Exterior lighting for the golf course practice facility is visible in the distance and the commercial properties to the west of the Project create skyglow brightness.

Figure 10: ME3 June 27, 2018, 2:30 PMFigure 11: ME3 June 26, 2018, 9:30 PM



d. Monitoring Site MS1:

Monitoring Site MS1 is located on the south-side of the Dominguez Channel between South Main Street and East



Del Amo Boulevard to evaluate the Project west property line. The distance to the Project property line is approximately 1,000 feet. Tall sports lighting poles within the Project Site are highly visible in the foreground and contribute to the general high illumination of the area.



Figure 12: June 27, 2018, 2:30 PM



Figure 13: MS1 June 26, 2018, 9:30 PM

e. Monitoring Site MN1:

Monitoring Site MN1 is located at the existing north parking lot on MLK Jr St, to evaluate the Project north property line. The distance to the Project property line is approximately 50 feet. The Project Site is illuminated immediately south of MN1 with tall sports light poles, visible within the Project site.



Figure 14: MN1 June 27, 2018, 2:30 PM



Figure 15: MN1 June 26, 2018, 9:30 PM

8. The Project Analysis

The Project would introduce new Lighting as described in Section 2 and depicted in Appendix A.

The following criteria are used to evaluate the Light Trespass and Glare impacts of the Project:

- Light Trespass illuminance greater than 0.74 fc at adjacent residential zoned property lines.
- Light source luminance visible from the light sensitive use properties creates high contrast conditions, greater than 30 to 1 contrast ratios as viewed from the monitoring sites above.

8.1 Light Trespass Illuminance Analysis – Project Lighting

The Light Trespass analysis evaluates the illuminance (fc) at the nearest residential property line adjacent to the Project Site with respect to light leaving the Project toward adjacent light sensitive properties from the Project Lighting. The Project Lighting include the light sources as defined in and as illustrated in the Project Lighting Concept Plan in Appendix A.

Table 4: Light Trespass Illuminance (fc) – Project Lighting, calculated at vertical planes

Vertical Plane	Description	Illuminance (fc)			Analysis
		Vertical			
		Max	Min	Avg	
VP-E1	East Residential Property Line	0.70	0.10	0.46	Below threshold, not a significant impact
VP-N1	North Residential Property Line	0.30	0.10	0.22	Below threshold, not a significant impact
VP-S1	South Residential Property Line	0.10	0.00	0.07	Below threshold, not a significant impact

As summarized in Table 4, the Project Light Trespass illuminance at the Vertical Planes varies from a minimum of 0 fc to a maximum of 0.70 fc. Complete calculated data is presented in Appendix G.

The Project Light Trespass illuminance calculation data is presented below in rendered views within Figure 16. The calculated data is presented as a grid on the Vertical Plane surface from the Project site toward the light sensitive use properties and is summarized in Appendix G.

The maximum Project Light Trespass illuminance at vertical plane VPE1 is 0.70 fc, which is less than the 0.74 fc maximum illuminance threshold. Vertical Plane VPE1 is adjacent to the property line of the rear of the residential properties to the east of the Project site. The Light Trespass illuminance is less than 0.74 fc therefore the Project Lighting will not create a new source of Light Trespass at VPE1.

The maximum Project Light Trespass illuminance at vertical plane VPN1 is 0.30 fc, which is less than the 0.74 fc maximum illuminance threshold. Vertical Plane VPN1 is adjacent to the property line of the rear of the residential properties to the north of the Project site. The Light Trespass illuminance is less than 0.74 fc therefore the Project Lighting will not create a new source of Light Trespass at VPN1.

The maximum Project Light Trespass illuminance at vertical plane VPS1 is 0.10 fc, which is less than the 0.74 fc maximum illuminance threshold. Vertical Plane VPS1 is adjacent to the property line of the rear of the residential properties to the south of the Project site. The Light Trespass illuminance is less than 0.74 fc therefore the Project Lighting will not create a new source of Light Trespass at VPS1.

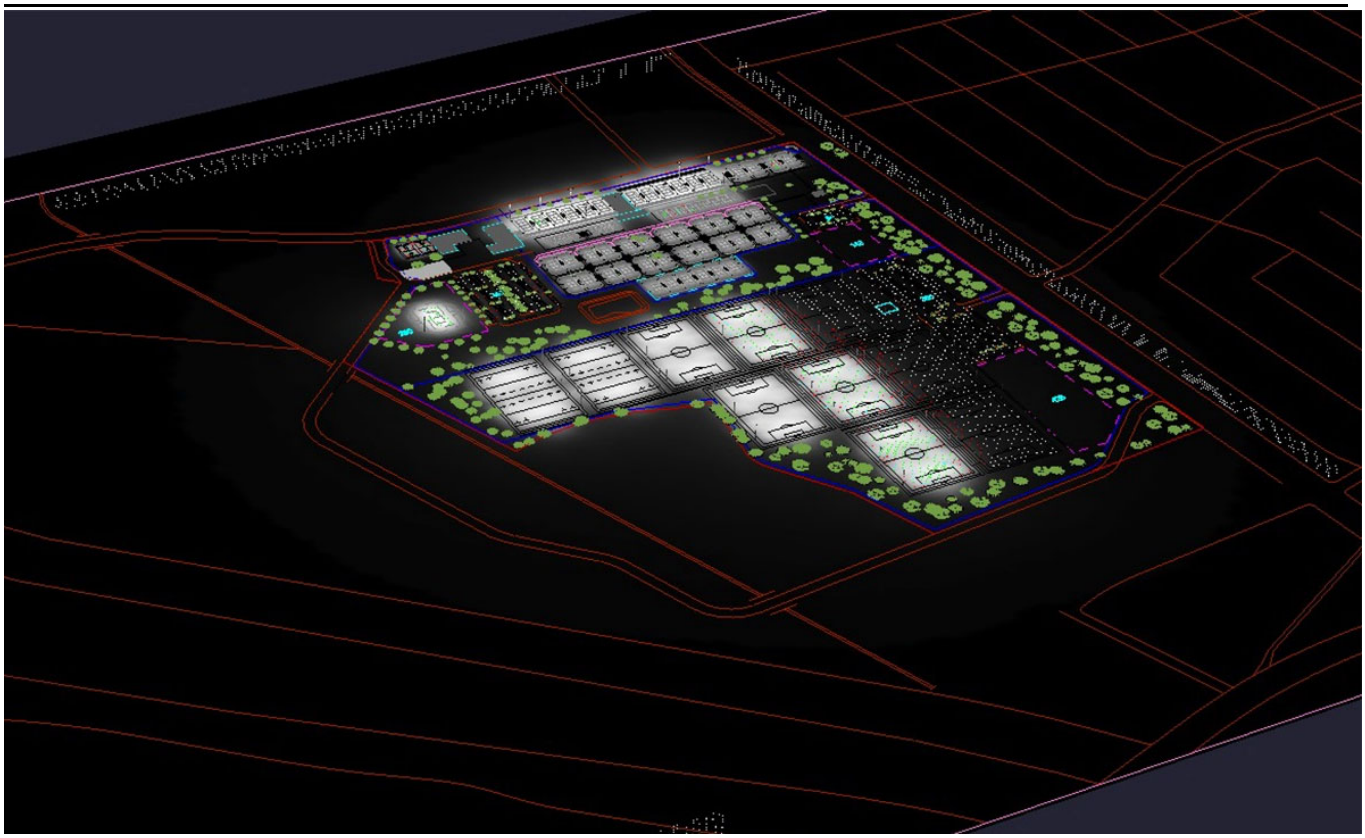

Figure 16: Project Light Trespass Illuminance data (fc) rendered

The calculated Light Trespass confirms the maximum illuminance at the light sensitive properties is less than 0.74 fc and therefore the Project will not create a significant new source of Light Trespass illuminance.

8.2 Glare Analysis – Project Lighting

Glare from the Project Lighting occurs when light sources within the Project site are visible against a dark background, such as a dark sky, or when a high brightness source is aimed at a low angle within the field of view. The maximum source brightness is determined by the rated source luminance for lighting fixtures. The measured existing luminance is summarized in Table 3 in Section 7 above. Table 5 summarizes the contrast ratio calculated for the maximum night Project luminance (based on the Concepts presented in Appendix A, and compliance with applicable code lighting standards) versus the average existing measured luminance. The contrast ratio is calculated in comparison to the total measured existing luminance (Max to Average in Table 5). The results of this comparison of the Project luminance to the existing measured luminance indicates the Contrast Ratios are less than 30 to 1. Therefore, the Project would not create a source of high contrast and or Glare greater than 30 to 1 contrast ratios when viewed from the Monitoring Sites, M1 through M4.

The Project Lighting Concept Design (Appendix A) defines a lighting design program for the Project that limits the Glare at adjacent properties by shielding the light sources and restricting the Project Lighting to the Project Site. The Project Lighting would comply with the applicable requirements of CalGreen, which limits view of bright light sources such as parking or field light poles. The California Green Building Standards Code (Title 24, Part 11), defines light trespass standards for buildings and exterior site lighting. This code defines the amount of energy and light trespass allowed based upon the intensity of nighttime use. All urban areas in California are defined as LZ3 by default. Table 5.106.8 of the CEC stipulates backlight, uplight, and glare requirements for all exterior lighting to reduce the brightness visible from adjacent properties. Within Table 5.106.8, for Zone 3, the maximum allowable glare rating is G2, which allows up to 375 zonal lumens for either BVH or FVH zones. The 375 lumen maximum is comparable to an approximately 30 cd/m^2 surface luminance for a light source area approaching 1 m^2. The Project

Lighting is evaluated with a maximum luminance of 100 cd/m^2 to present a conservative analysis of Glare. The actual Project Luminance will be determined by the specific lighting products installed and the distance from the light fixtures to the sensitive use properties, which are anticipated to be less than the maximum luminance analyzed.

The Project Lighting which may be visible from the surrounding properties is evaluated in comparison to the Average Measured Luminance identified in Section 6 above and as summarized in Table 5 (based on the Project Lighting Concept Design and compliance with applicable code lighting standards). The Contrast Ratio is calculated by dividing the Project Lighting Maximum Luminance by the Average Measured Luminance. Contrast Ratios less than 30:1 are considered medium contrast, and will not introduce a new source of glare. Contrast Ratios less than 10:1 are considered low contrast, and will not introduce a new source of glare.

Table 5: Contrast Ratio: comparison of existing measured to Project Lighting

Monitoring Site	Existing Measured Luminance (cd/m^2)		Project Lighting Luminance		Evaluation
	Average	Maximum	Max (cd/m^2)	Contrast Ratio (max to average)	
ME1	28.3	583	100	4	Low Contrast Ratio, No Glare Impact
ME2	4.2	82	100	24	Medium Contrast Ratio, No Glare Impact
ME3	4.2	80	100	24	Medium Contrast Ratio, No Glare Impact
MN1	331.9	6765	100	0.3	Low Contrast Ratio, No Glare Impact
MS1	10.6	99	100	9	Low Contrast Ratio, No Glare Impact

The calculated contrast ratio for Monitoring sites ME2 and ME3 are less than 30:1, and therefore are medium contrast. At Monitoring Sites ME2 and ME3 Project Lighting will not create a new source of Glare.

The calculated contrast ratio for Monitoring sites ME1, MN1 and MS1 are less than 10:1, and therefore are low contrast. At Monitoring Sites ME1, MN1 and MS1 Project Lighting will not create a new source of Glare.

8.3 Glare Analysis for Roadways – Project Lighting

The potential lighting impact to driver's visibility from the Project Lighting is evaluated by way of the methodology defined above. As summarized below, the results of this evaluation demonstrate the light impacts resulting from the Project Lighting at the locations where light is under review are below the significance threshold for excessive luminance, or Glare. The Project Lighting would be consistent with the California Vehicle Code standard for motorists on roadways approaching the Project from all directions.

The Glare analysis of the Project Lighting assumes the simultaneous use of all Project Lighting at the maximum luminance calculated from the lighting product data, and compares the resulting luminance to the California Vehicle Code standards to determine if the Project Lighting will introduce a source of distracting Glare to drivers. The most stringent standard identified within the California Vehicle Code Section 21466.5, states: "except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlamberts (fL) shall not exceed 500 plus 100 times the angle, in roadway degrees, between the driver's field of view and the light source." Thus, a conservative evaluation, occurs where the Project Lights are visible within the centerline of the driver's field of view, the angle noted above within the field of view is 0, the surrounding surface luminance is less than 10 fL, and therefore the maximum allowable luminance is 500 fL. Therefore, the most conservative condition at night evaluates Project Lighting against a threshold for luminance of a maximum 500 fL.

A measured brightness within the driver's field of view of less than 10 fL may occur at night. The Project Lighting is evaluated with a maximum luminance of 100 cd/m^2 as viewed from a light sensitive use (based on the Project Lighting Concept Design and compliance with applicable code lighting standards). Calculating the equivalent Project Lighting luminance by converting to English units from metric units: 100 cd/m^2 equals 29.2 fL. The Project Lighting will not exceed 29.2 fL, which is 94% less than the 500 fL maximum, the most conservative limit stipulated by the California Vehicle Code for conditions where the minimum brightness in the driver's field of view is less than 10 fL.

For Project Lighting located beyond the driver's 10 degree field of view the maximum luminance is permitted to increase under the California Vehicle Code. For example, light sources located 15 degrees from the centerline of the driver's field of view would be limited to a maximum of 1,000 fL (500 fL plus 100 times the angle (5 degrees) = 1,000 fL). As calculated above, Project Lighting would operate at maximum of 29.2 fL at night, or less than approximately 6% of the maximum allowed by the California Vehicle code for those locations at 15 degrees from the center of the driver's field of view. Therefore, at night the Project Lighting will not exceed the 1000 fL threshold and will not introduce a new source of Glare as defined by the California Vehicle Code Section 21466.5.

These values are less than the California Vehicle Code standard, including 6% of the maximum allowable luminance identified as the threshold for Glare, therefore the Project Lighting will not create a new source of Glare.

8.4 Light Trespass Illuminance Analysis – Signs Lighting

The Signs Light Trespass analysis evaluates the illuminance (fc) at the Vertical Planes identified in Figure 4 above with respect to light leaving the Project toward adjacent light sensitive properties from the Project Signs Lighting. The Project Signs Lighting includes the light sources as defined in and as illustrated in the Project Signs Concept Plan in Appendix B.

As summarized in Table 6, the Project Signs Light Trespass illuminance at the Vertical Planes varies from a minimum of 0 fc to a maximum of 0.3 fc. Complete calculated data is presented in Appendix H.

The Project Signs Light Trespass illuminance calculation data is presented below in rendered views within Figure 17. The calculated data is presented as a grid on the Vertical Plane surface from the Project site toward the light sensitive use properties and is summarized in Appendix H.

The maximum Project Signs Light Trespass illuminance at vertical plane VPE1 is 0.3 fc, which is less than the 0.74 fc maximum illuminance threshold. Vertical Plane VPE1 is adjacent to the property line of the rear of the residential properties to the east of the Project site. The Light Trespass illuminance is less than 0.74 fc therefore the Project Sign Lighting will not create a new source of Light Trespass at VPE1.

Table 6: Light Trespass Illuminance (fc) – Project Signs, calculated at vertical planes

Vertical Calculation Planes	Description	Illuminance (fc)			Analysis
		Max	Min	Average	
VPE1	East Residential Property Line	0.3	0	0.03	Below Threshold of 0.74 fc
VPN1	North Residential Property Line	0	0	0	Below Threshold of 0.74 fc
VPS1	South Residential Property Line	0	0	0	Below Threshold of 0.74 fc

The maximum Project Signs Light Trespass illuminance at vertical plane VPS1 is 0 fc, which is less than the 0.74 fc maximum illuminance threshold. Vertical Plane VPS1 is adjacent to the property line of the rear of the residential

properties to the south of the Project site. The Light Trespass illuminance is less than 0.74 fc therefore the Project Signs Lighting will not create a new source of Light Trespass at VPS1.

The maximum Project Signs Light Trespass illuminance at vertical plane VPN1 is 0 fc, which is less than the 0.74 fc maximum illuminance threshold. Vertical Plane VPN1 is adjacent to the property line of the rear of the residential properties to the north of the Project site. The Light Trespass illuminance is less than 0.74 fc therefore the Project Signs Lighting will not create a new source of Light Trespass at VPN1.

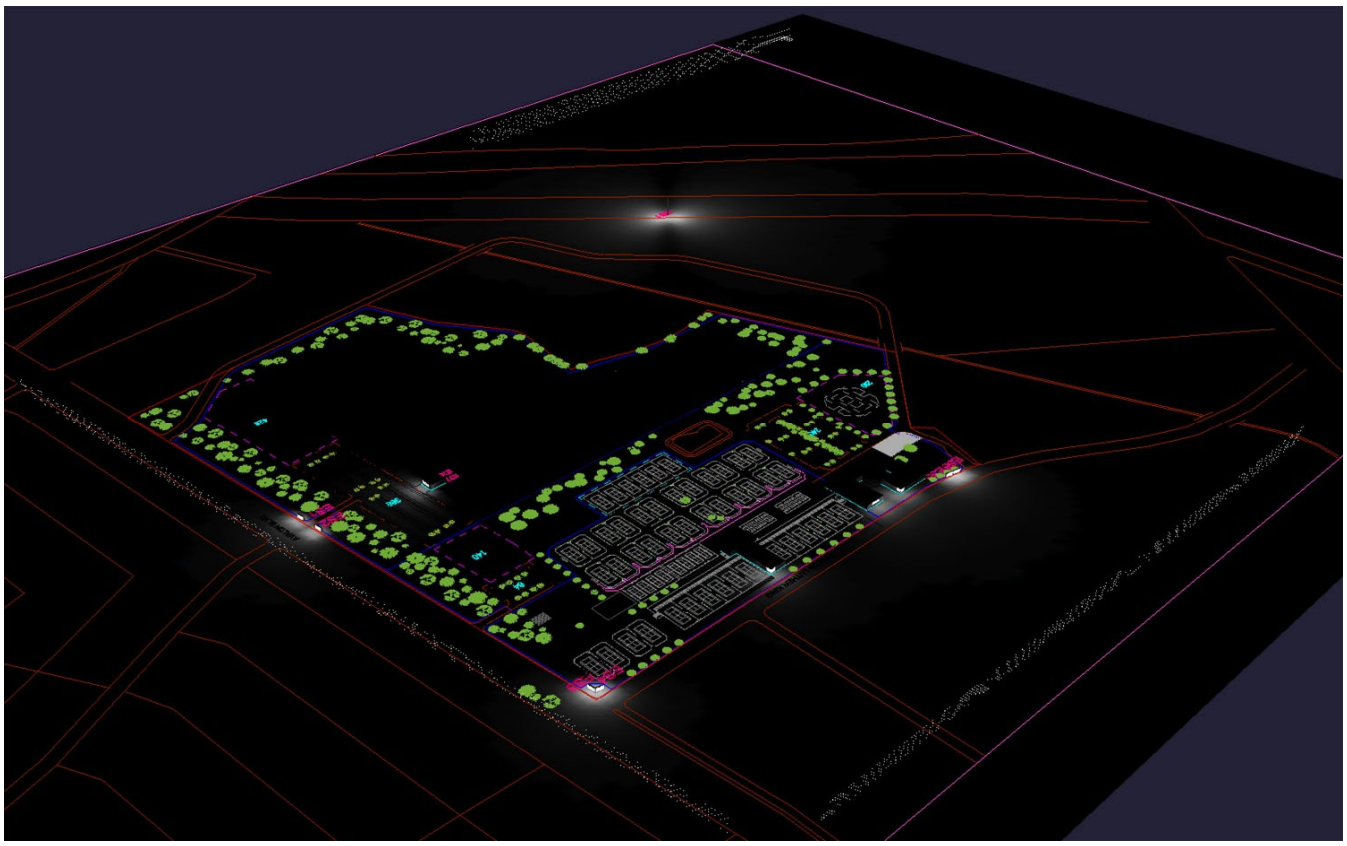

Figure 17: Light Trespass Illuminance data (fc) Signs Lighting, rendered view from northeast

The calculated Project Signs Light Trespass confirms the maximum illuminance at the light sensitive properties is less than 0.74 fc and therefore the Project Signs will not create a significant new source of Light Trespass illuminance.

8.5 Glare Analysis – Signs Lighting

Glare from Project Signs Lighting occurs when the lit signs within the Project site are visible against a dark background, such as a dark sky, or when a high brightness light source is aimed at a low angle within the field of view. The maximum source brightness is determined by the rated source luminance for each sign type as defined in Appendix B. Digital Sign DS-1 is evaluated with a maximum luminance of 300 cd/m^2. Building Identification Signs ID1 through ID8 and Entry Monument Signs ES 1 through ES6 are evaluated with a maximum luminance of 100 cd/m^2. The measured existing luminance is summarized in Table 3 in Section 7 above. Table 7 summarizes the contrast ratio calculated for the maximum night Project Sign luminance (based on the Project Signs Concept in Appendix B and compliance with applicable code lighting standards) versus the average existing measured luminance. The contrast ratio is calculated in comparison to the total measured existing luminance (Max to Average in Table 7). The results of this comparison of the Project luminance to the existing measured luminance indicates the Contrast Ratios are less than 30 to 1. Therefore, the Project Signs Lighting would not create a source of high

contrast and or Glare or greater than 30 to 1 contrast ratios when viewed from the Monitoring Sites, M1 through M4.

The Project Signs Lighting Concept Design (Appendix B) defines a lighting program for the Project that limits the Glare at adjacent properties by limiting the light source luminance. The Project Signs Lighting is evaluated in comparison to the existing Baseline Average luminance identified in Section 7 above and as summarized in Table 7 below.

Table 7: Contrast Ratio: comparison of existing measured to Project Signs Lighting[5]

Monitoring Site	Existing Measured Luminance (cd/m²)		Project Lighting Luminance		Evaluation
	Average	Maximum	Max (cd/m²)	Contrast Ratio (max to average)	
ME1	28.3	583	100	4	Low Contrast Ratio, No Glare Impact
ME2	4.2	82	100	24	Medium Contrast Ratio, No Glare Impact
ME3	4.2	80	100	24	Medium Contrast Ratio, No Glare Impact
MN1	332	6765	100	0.3	Low Contrast Ratio, No Glare Impact
MS1	10.6	99	300	28.3	Medium Contrast Ratio, No Glare Impact

The Project Signs Lighting which may be visible from the surrounding properties is evaluated in comparison to the Average Measured Luminance identified in Section 7 above and as summarized in Table 7 (based on the Project Signs Lighting Concept Design and compliance with applicable code lighting standards). The Contrast Ratio is calculated by dividing the Project Lighting Maximum Luminance by the Average Measured Luminance. Contrast Ratios less than 30:1 are considered medium contrast, and will not introduce a new source of glare. Contrast Ratios less than 10:1 are considered low contrast, and will not introduce a new source of glare.

The calculated contrast ratio for Monitoring sites ME2, ME3, and MS1 are less than 30:1, and therefore are medium contrast. At Monitoring Sites ME2, ME3, and MS1 Project Lighting will not create a new source of Glare.

The calculated contrast ratio for Monitoring sites ME1, and MN1 are less than 10:1, and therefore are low contrast. At Monitoring Sites ME1 and MN1 Project Lighting will not create a new source of Glare.

8.6 Glare Analysis for Roadways - Signs Lighting

The lighting impact to driver's visibility from the Project Signs Lighting is evaluated by way of the methodology defined above. As summarized below, the results of this evaluation demonstrate the light impacts resulting from the Project Signs Lighting at the locations where light is under review are below the significance threshold for excessive luminance, or Glare. The Signs Lighting would be consistent with the California Vehicle Code standard for roadways approaching the Project from all directions.

The glare analysis of the Project Signs Lighting at night (20 minutes after sunset until 20 minutes before sunrise) assumes the simultaneous use of all Project Signs Lighting at the maximum luminance as defined in Appendix B and compares the resulting luminance to the California Vehicle Code standards to determine if the Project Signs Lighting will introduce a source of distracting Glare to drivers. The Project Signs Lighting includes Digital Signs which operate at night with maximum luminance of 300 cd/m^2 , and Project Identification Signs and Project Entrance Signs which operate with a maximum luminance of 100 cd/m^2. Therefore, the Project Digital Signs are evaluated

[5] *Based on the Project Lighting Concept Design and compliance with applicable code lighting standards*

to present the most conservative analysis of Glare for Signs Lighting at night. The Project Identification Signs and Project Entrance Signs have lower luminance which results in lower Glare.

The most stringent standard identified within the California Vehicle Code Section 21466.5, states: "except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlamberts (fL) shall not exceed 500 plus 100 times the angle, in roadway degrees, between the driver's field of view and the light source." Thus, a conservative evaluation, occurs where the Project Lights are visible within the centerline of the driver's field of view, the angle noted above within the field of view is 0, the surrounding surface luminance is less than 10 fL, and therefore the maximum allowable luminance is 500 fL. Therefore, the most conservative condition at night evaluates Project Lighting against a threshold for luminance of a maximum 500 fL.

A measured brightness within the driver's field of view of less than 10 fL may occur at night. The Project Lighting is evaluated with a maximum luminance of 300 cd/m^2 at the Digital Sign DS-1 along the north edge of the drainage channel to the south of the Project Site, north of the 405 Freeway (see figure 4 above). Calculating the equivalent Project Lighting luminance by converting to English units from metric units: 300 cd/m^2 equals 87.6 fL. The Project Lighting will not exceed 87.6 fL, which is 83% less than the 500 fL maximum, the most conservative limit stipulated by the California Vehicle Code for conditions where the minimum brightness in the driver's field of view is less than 10 fL.

For Project Signs Lighting located beyond the driver's 10 degree field of view the maximum luminance is permitted to increase under the California Vehicle Code. For example, light sources located 15 degrees from the centerline of the driver's field of view would be limited to a maximum of 1,000 fL (500 fL plus 100 times the angle (5 degrees) = 1,000 fL). All Project Lighting will operate at maximum of 87.6 fL at night, or less than approximately 9% of the maximum allowed by the California Vehicle code for those locations at 15 degrees from the center of the driver's field of view. Therefore, at night the Project Lighting will not exceed the 1000 fL threshold and will not introduce a new source of Glare as defined by the California Vehicle Code Section 21466.5.

The Sign Lighting is also evaluated during twilight (the transition period from day to night, from 20 minutes before sunset to 20 minutes after sunset, and from 20 minutes before sunrise to 20 minutes after sunrise). Sunlight increases gradually from the minimum brightness at sunrise to maximum brightness at mid-day, and then decreases gradually to the minimum brightness at sunset. Therefore, the minimum ambient luminance occurs at sunset or sunrise. However, in order to analyze the most conservative, low level sunlight conditions, this analysis adjusts the time frame for the minimum ambient luminance condition of 10 fL to 20 minutes prior to sunset and 20 minutes after sunrise, extending the duration of night. At 20 minutes prior to sunset the ambient sunlight will be greater than the minimum values at sunset, and at 20 minutes after sunrise the luminance will be greater than the minimum at sunrise. At 20 minutes prior to sunset, the minimum luminance values within the driver's field of view will be above the minimum night time values (10fL) due to the light from the setting or rising sun. However, to maintain a conservative analysis, this evaluation assumes the minimum luminance within the driver's field of view will be less than 10 fL from 20 minutes prior to sunset until 20 minutes after sunrise. Therefore, the maximum luminance threshold during this time will remain at 500 fL as noted above in the evaluation of the night threshold. The maximum light source luminance of 500 fL converting to metric units equals 1579 cd/m^2.

The Project Signs Lighting is designed to limit maximum luminance to less than 300 cd/m^2 (87.6 fL) maximum luminance, from 20 minutes before sunset to 20 minutes after sunrise. Therefore, the Sign Lighting will not exceed 300 cd/m^2 for the period beginning 20 minutes prior to sunset until 20 minutes after sunrise. Therefore, at 20 minutes before and including sunset and at sunrise and 20 minutes after, the Sign Lighting will not exceed the threshold of 500 fL, and will therefore not introduce a new source of glare.

Sign Lighting is designed to not exceed 300 candelas/m^2 (87.6 fL) luminance at night. These values are less than the California Vehicle Code standard, including 17% of the maximum allowable luminance identified as the threshold for glare during the day, therefore Sign Lighting will not create a new source of Glare.

The evaluation of the Project illuminated signs during the day (20 minutes after sunrise until 20 minutes before sunset) compares the daytime, ambient brightness to the maximum sign brightness stipulated by the California Vehicle Code during full sun conditions and overcast sky conditions. The Project Digital Signs will operate with a

maximum luminance of 7000 cd/m^2. The Project Identification Signs and Project Entrance Signs will not operate during the day. Therefore, the Project Digital Signs are evaluated to present the most conservative analysis of Glare for Signs Lighting during the day.The Project Digital Signs will operate during the day (20 minutes after sunrise until 20 minutes before sunset) at a maximum luminance of 7000 cd.m2. The evaluation of the Project Digital Signs during the day compares the daytime, ambient brightness to the maximum sign brightness stipulated by the California Vehicle Code during full sun conditions and overcast sky conditions. The California Vehicle Code, Section 21466.5 above permits the Project signs to "generate light intensity levels greater than 1,000 times the minimum measured brightness in the driver's field of view, except when the minimum values are less than 10 (fL)."

During the day (20 minutes after sunrise until 20 minutes before sunset) sunlight with clear sky conditions or light overcast conditions provides sufficient illuminance to generate surface brightness greater than 10 fL and up to 1200 fL on the least reflective surfaces, such as roadway pavement. Utilizing the value of 10fL as the minimum within the driver's field of view, the maximum allowable brightness would be 1,000 times 10 fL, or 10,000 fL. The Applicant proposes that the Project illuminated signs not exceed 7,000 cd/m^2 (2,043 fL) during the daytime hours of operation, and Project signs would therefore operate at less than 20% of the maximum luminance stipulated by the California Vehicle Code. Therefore, the Project illuminated signs would not create a new source of glare during day time hours of operation with clear sky or light overcast conditions.

Severe storms, heavy cloud cover, or other atmospheric conditions may occur during the day, which may cause the minimum brightness within the driver's field of view to be less than 10 fL. The Project Digital Signs include an electronic control system to reduce the sign luminance from 7,000 cd/m^2 (2043 fL) to 300 cd/m^2 (87.6 fL) maximum when the ambient sun light falls to illuminance values similar to night, less than 100 fc. During the day, when storms, cloud cover, or other low ambient sunlight conditions occur and when the ambient sunlight is less than 100 fc, the Project illuminated signs would transition from the daytime 7,000 cd/m^2 (2043 fL) to 300 cd/m^2 (87.6 fL) maximum, and thereby ensure that the sign brightness remains less than 20% of the maximum brightness stipulated by the California Vehicle Code. Therefore, the Project Signs Lighting would not create a new source of glare during day time periods with storm or severe overcast weather conditions.

Project Signs Lighting will not exceed 300 candelas/m^2 (87.6 fL) luminance at night, and will not exceed 7000 cd/m^2 luminance during the days Project Signs Lighting luminance is less than the California Vehicle Code maximum allowable luminance identified as the threshold for Glare. Therefore the Project Signs Lighting will not create a new source of Glare.

9. Conclusions

The Project proposes to install new outdoor lighting and lit signs while minimizing Light Trespass and Glare to neighboring sensitive use properties through design features that comply with the applicable code standards

This analysis evaluates the potential for Project Lighting and Sign Lighting to create a new source of Light Trespass and or Glare at adjacent sensitive use properties. The Project Lighting locations, types, dimensions, and maximum luminance are as described by the Concept Plan in Appendix A and are evaluated with all Project Lighting operating simultaneously at maximum luminance. The Project Signs Lighting locations, types, dimensions and maximum luminance were evaluated as described in the Signs Lighting Concept Plan in Appendix B and are evaluated with all Signs Lighting operating simultaneously at maximum luminance. As such, this analysis represents a conservative evaluation of the proposed Project and the potential for off-site Light Trespass, and Glare. This analysis concludes the Project will not create a new source of Light Trespass and or Glare.

APPENDIX A: Site Lighting Concept Plan

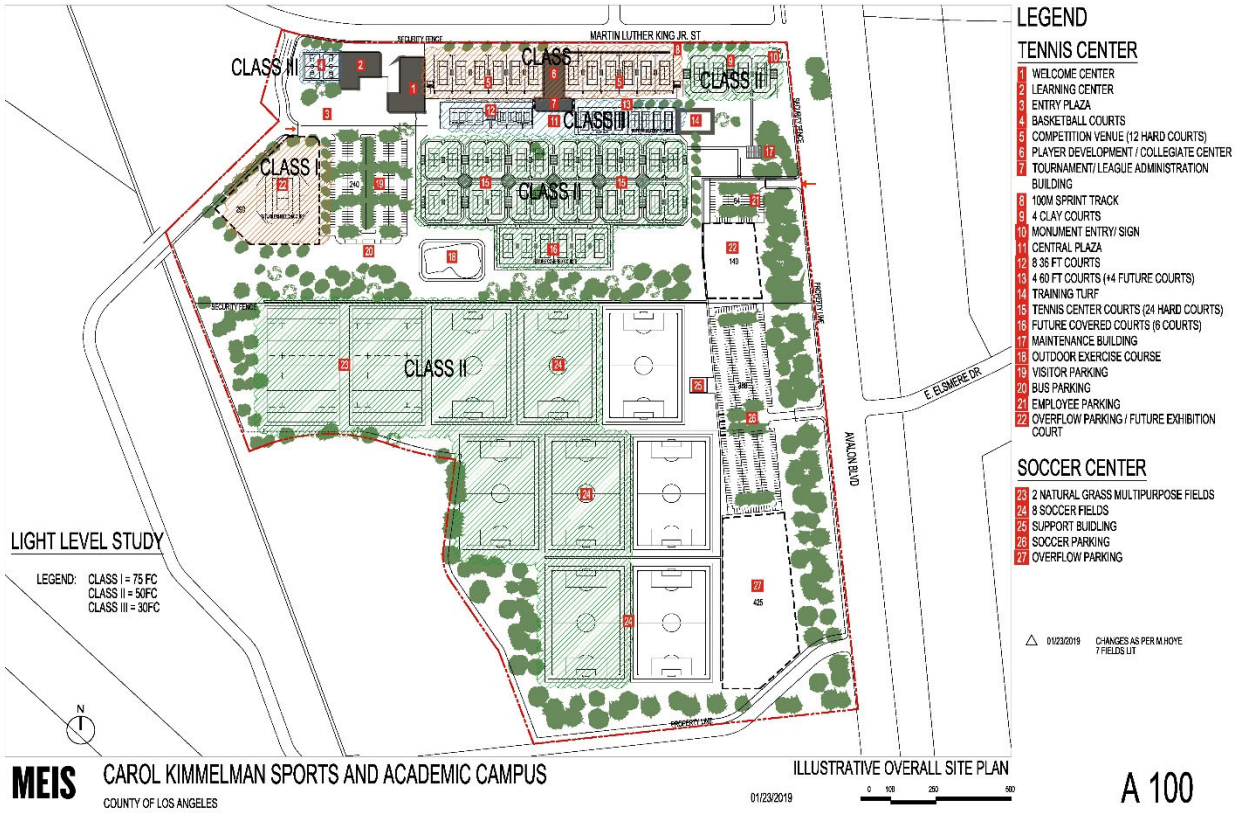

Figure 18: Project Site Plan

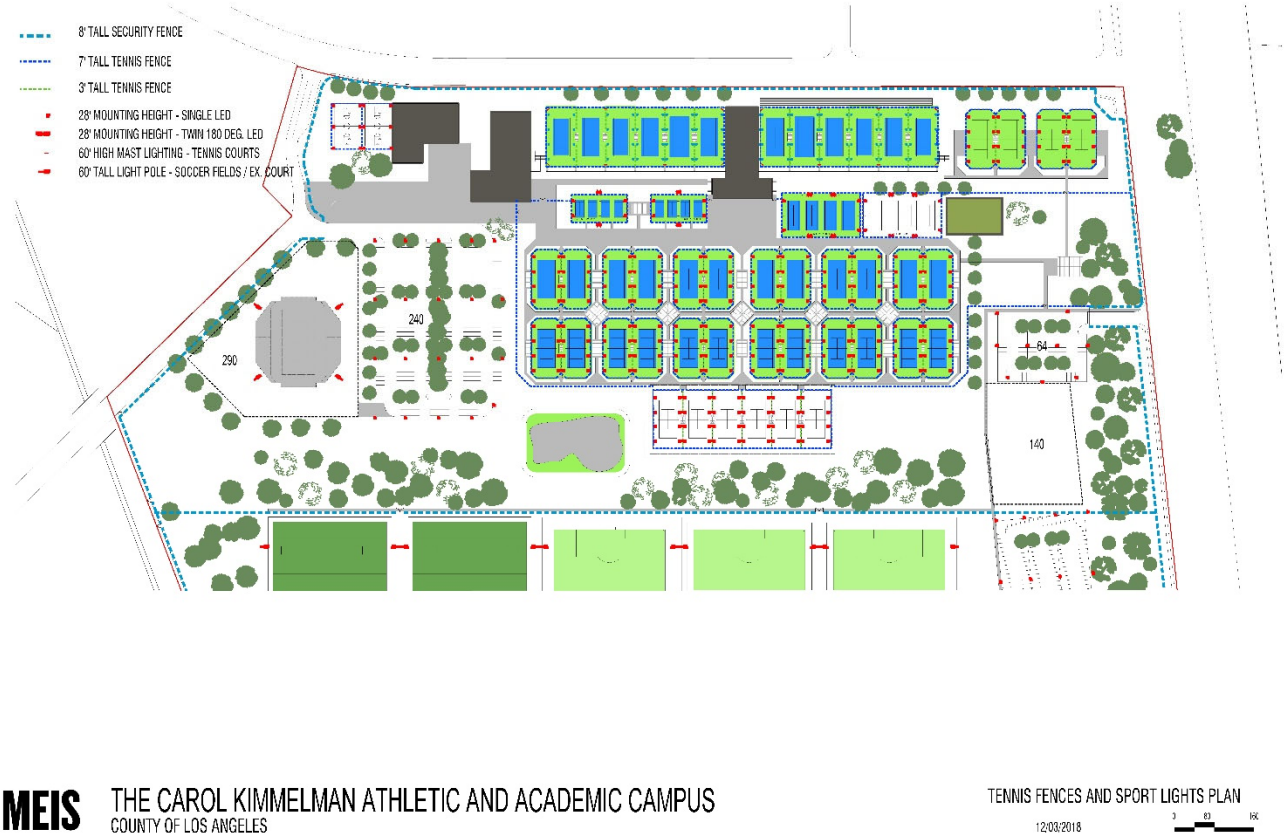

Figure 19: Project Lighting Plan - North

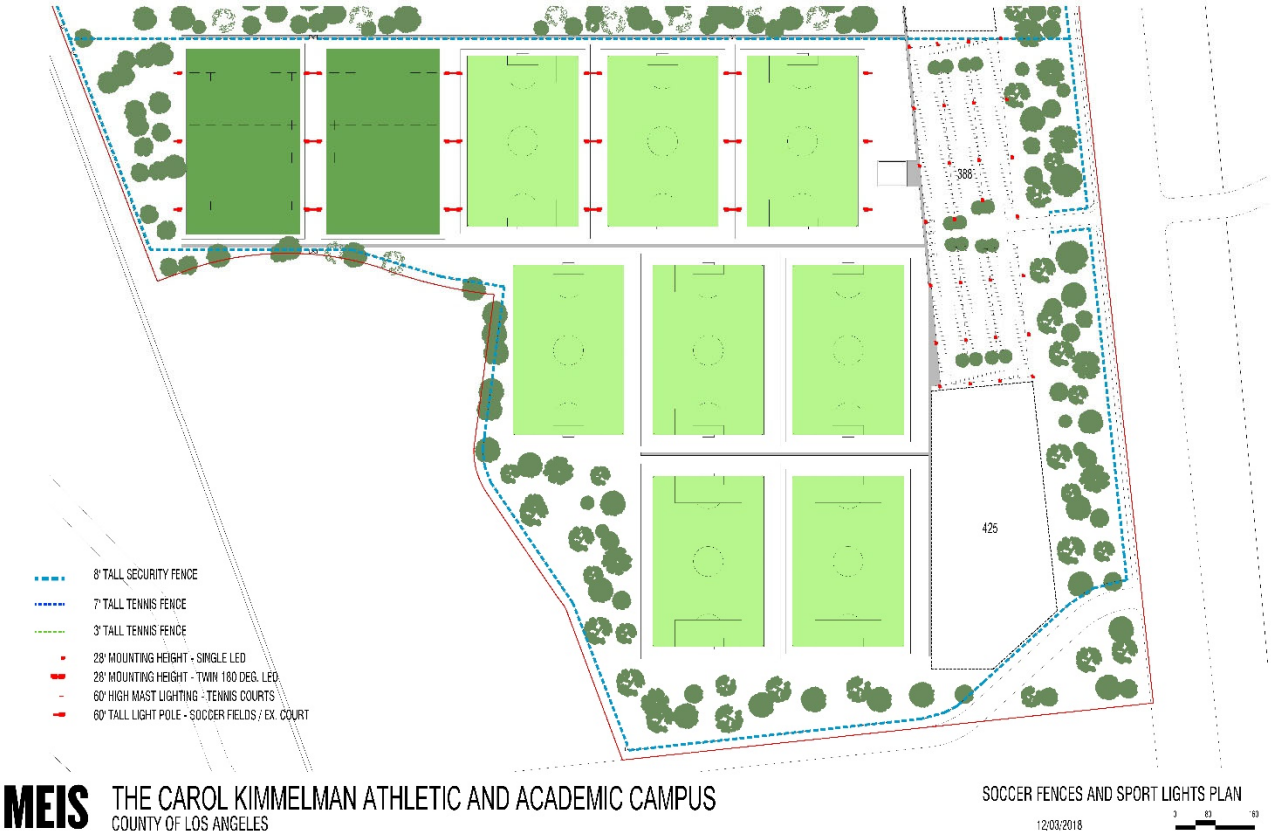

Figure 20: Project Lighting Plan - South

APPENDIX B: Project Signs Lighting Concept Plan



Figure 21: Project Signs Location Plan

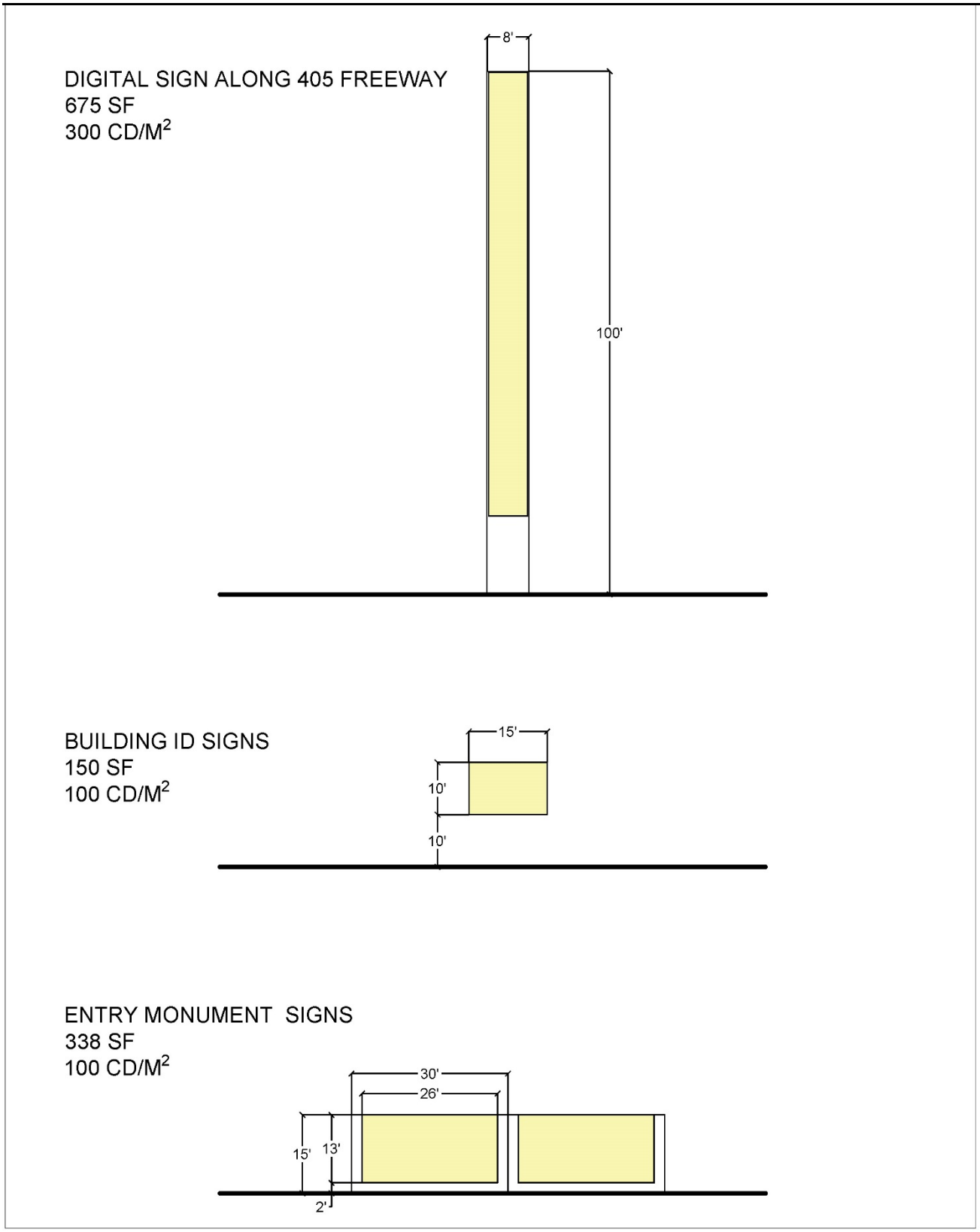

Figure 22: Project Signs Dimensions

APPENDIX C: CalGreen 2016 Building Energy Efficiency Standards, pages 40,41

10-114 – DETERMINATION OF OUTDOOR LIGHTING ZONES AND ADMINISTRATIVE RULES FOR USE

This section establishes rules for implementing outdoor lighting zones to show compliance with Section 140.7 of Title 24, California Code of Regulations, Part 6.

(a) **Lighting Zones.** Exterior lighting allowances in California vary by Lighting Zones (LZ).

(b) **Lighting Zone Characteristics.** TABLE 10-114-A specifies the relative ambient illumination level and the statewide default location for each lighting zone.

(c) **Amending the Lighting Zone Designation.** A local jurisdiction may officially adopt changes to the lighting zone designation of an area by following a public process that allows for formal public notification, review, and comment about the proposed change. The local jurisdiction may determine areas where Lighting Zone 4 is applicable and may increase or decrease the lighting zones for areas that are in State Default Lighting Zones 1, 2 and 3, as specified in TABLE 10-114-A.

(d) **Commission Notification, Amended Outdoor Lighting Zone Designation.** Local jurisdictions who adopt changes to the State Default Lighting Zones shall notify the Commission by providing the following materials to the Executive Director:

1. A detailed specification of the boundaries of the adopted Lighting Zones, consisting of the county name, the city name if any, the zip code(s) of the re designated areas, and a description of the physical boundaries within each zip code;
2. A description of the public process that was conducted in adopting the Lighting Zone changes; and
3. An explanation of how the adopted Lighting Zone changes are consistent with the specifications of Section 10-114.

(e) The Commission shall have the authority to not allow Lighting Zone changes which the Commission finds to be inconsistent with the specifications of Section 10-114.

TABLE 10-114-A LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS

Zone	Ambient Illumination	State wide Default Location	Moving Up to Higher Zones	Moving Down to Lower Zones
LZ0	Very Low	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves can be designated as LZ1 or LZ2 if they are contained within such a zone.	Not applicable
LZ1	Low	Developed portion of government designated parks, recreation areas, and wildlife preserves. Those that are wholly contained within a higher lighting zone may be considered by the local government as part of that lighting zone.	Developed portion of a government designated park, recreation area, or wildlife preserve, can be designated as LZ2 or LZ3 if they are contained within such a zone.	Not applicable.
LZ2	Moderate	Rural areas, as defined by the 2010 U.S. Census.	Special districts within a default LZ2 zone may be designated as LZ3 or LZ4 by a local jurisdiction. Examples include special commercial districts or areas with special security considerations located within a rural area.	Special districts and government designated parks within a default LZ2 zone maybe designated as LZ1 by the local jurisdiction for lower illumination standards, without any size limits.
LZ3	Moderately High	Urban areas, as defined by the 2010 U.S. Census.	Special districts within a default LZ3 may be designated as a LZ4 by local jurisdiction for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels.	Special districts and government designated parks within a default LZ3 zone may be designated as LZ1 or LZ2 by the local jurisdiction, without any size limits.
LZ4	High	None.	Not applicable.	Not applicable.

APPENDIX D: IESNA 10th Edition Lighting Handbook, Table 26.4, Nighttime Outdoor Lighting Zone Definitions

Table 26.4 | Nighttime Outdoor Lighting Zone Definitions

Zone	Outdoor Lighting Situation	Definition
LZ4	High Ambient Lighting	Areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform and/or continuous. After curfew, lighting may be extinguished or reduced in some areas as activity levels decline.
LZ3	Moderately High Ambient Lighting	Areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security and/or convenience and it is often uniform and/or continuous. After curfew, lighting may be extinguished or reduced in most areas as activity levels decline.
LZ2	Moderate Ambient Lighting	Areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting may typically be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, lighting may be extinguished or reduced as activity levels decline.
LZ1	Low Ambient Lighting	Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, most lighting should be extinguished or reduced as activity levels decline.
LZ0	No Ambient Lighting	Areas where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environment. Human activity is subordinate in importance to nature. The vision of human residents and users is adapted to the darkness, and they expect to see little or no lighting. When not needed, lighting should be extinguished.

APPENDIX E: IESNA 10th Edition Lighting Handbook, Table 26.5, Recommended Light Trespass Illuminance Limits

Table 26.5 | Recommended Light Trespass Illuminance Limits

Lighting Zone	Limit in lux[a]	
	Pre-curfew	Post-curfew
LZ4	15	6
LZ3	8	3
LZ2	3	1
LZ1	1	0
LZ0	0.1	0

a. Maximum initial illuminance on a plane perpendicular to the line of sight to the luminaire(s). Plane located at observer position where light trespass is under review. [7]

APPENDIX F: Project Lighting Illuminance Light Trespass Calculation (fc)

Project Lighting illuminance data presented below is derived from the lighting illuminance calculations prepared as per the methods described in Section 6.2 above. Illuminance data is presented in the following tables with location coordinates defined relative to the elevation and horizontal distance from lower left, viewing from the Property to the vertical plane where Light Trespass illuminance is under review. Grid data is displayed at ten feet on center, vertical and horizontal.

Vertical Plane VPE1

HORIZONTAL (ft)	0	10	20	30	40	50	60	70	80	90	100
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	110	120	130	140	150	160	170	180	190	200	210
55	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	220	230	240	250	260	270	280	290	300	310	320
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2

HORIZONTAL (ft)	330	340	350	360	370	380	390	400	410	420	430
55	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
35	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

HORIZONTAL (ft)	440	450	460	470	480	490	500	510	520	530	540
55	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
45	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

35	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
25	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
15	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3

HORIZONTAL (ft)	**550**	**560**	**570**	**580**	**590**	**600**	**610**	**620**	**630**	**640**	**650**
55	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5
5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

HORIZONTAL (ft)	**660**	**670**	**680**	**690**	**700**	**710**	**720**	**730**	**740**	**750**	**760**
55	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
45	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4

HORIZONTAL (ft)	**770**	**780**	**790**	**800**	**810**	**820**	**830**	**840**	**850**	**860**	**870**
55	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7
45	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5

HORIZONTAL (ft)	**880**	**890**	**900**	**910**	**920**	**930**	**940**	**950**	**960**	**970**	**980**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.5
25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.4

HORIZONTAL (ft)	**990**	**1000**	**1010**	**1020**	**1030**	**1040**	**1050**	**1060**	**1070**	**1080**	**1090**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

35	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6
25	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.6
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

HORIZONTAL (ft)	**1100**	**1110**	**1120**	**1130**	**1140**	**1150**	**1160**	**1170**	**1180**	**1190**	**1200**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.6
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

HORIZONTAL (ft)	**1210**	**1220**	**1230**	**1240**	**1250**	**1260**	**1270**	**1280**	**1290**	**1300**	**1310**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5
25	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5
15	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.5
5	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5

HORIZONTAL (ft)	**1320**	**1330**	**1340**	**1350**	**1360**	**1370**	**1380**	**1390**	**1400**	**1410**	**1420**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
5	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6

HORIZONTAL (ft)	**1430**	**1440**	**1450**	**1460**	**1470**	**1480**	**1490**	**1500**	**1510**	**1520**	**1530**
55	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
45	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6
35	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6
25	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
15	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5

HORIZONTAL (ft)	**1540**	**1550**	**1560**	**1570**	**1580**	**1590**	**1600**	**1610**	**1620**	**1630**	**1640**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

HORIZONTAL (ft)	**1650**	**1660**	**1670**	**1680**	**1690**	**1700**	**1710**	**1720**	**1730**	**1740**	**1750**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

HORIZONTAL (ft)	**1760**	**1770**	**1780**	**1790**	**1800**	**1810**	**1820**	**1830**	**1840**	**1850**	**1860**
55	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	0.6	0.6
5	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.7	0.6	0.6

HORIZONTAL (ft)	**1870**	**1880**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

HORIZONTAL (ft)	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

HORIZONTAL (ft)	**2090**	**2100**	**2110**	**2120**	**2130**	**2140**	**2150**	**2160**	**2170**	**2180**	**2190**
55	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
45	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5

35	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

HORIZONTAL (ft)	**2200**	**2210**	**2220**	**2230**	**2240**	**2250**	**2260**	**2270**	**2280**	**2290**	**2300**
55	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
45	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
35	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5
25	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5
15	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.5
5	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.6

HORIZONTAL (ft)	**2310**	**2320**	**2330**	**2340**	**2350**	**2360**	**2370**	**2380**	**2390**	**2400**	**2410**
55	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
45	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
35	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

HORIZONTAL (ft)	**2420**	**2430**	**2440**	**2450**	**2460**	**2470**	**2480**	**2490**	**2500**	**2510**	**2520**
55	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
35	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5
25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5
15	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5

HORIZONTAL (ft)	**2530**	**2540**	**2550**	**2560**	**2570**	**2580**	**2590**	**2600**	**2610**	**2620**	**2630**
55	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
35	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
25	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
15	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

HORIZONTAL (ft)	**2640**	**2650**	**2660**	**2670**	**2680**	**2690**	**2700**	**2710**	**2720**	**2730**	**2740**
55	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4
45	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

35	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
25	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

HORIZONTAL (ft)	**2750**	**2760**	**2770**	**2780**	**2790**	**2800**	**2810**	**2820**	**2830**	**2840**	**2850**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3

HORIZONTAL (ft)	**2860**	**2870**	**2880**	**2890**	**2900**	**2910**	**2920**	**2930**	**2940**	**2950**	**2960**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

HORIZONTAL (ft)	**2970**	**2980**	**2990**	**3000**	**3010**	**3020**	**3030**	**3040**	**3050**	**3060**	**3070**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2
45	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2
35	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2
15	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2
5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2

HORIZONTAL (ft)	**3080**	**3090**	**3100**	**3110**	**3120**	**3130**	**3140**	**3150**	**3160**	**3170**	**3180**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**3190**	**3200**	**3210**	**3220**	**3230**
55	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2

35	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2

Vertical Plane VPN1

HORIZONTAL (ft)	**0**	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**	**210**
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**220**	**230**	**240**	**250**	**260**	**270**	**280**	**290**	**300**	**310**	**320**
55	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
45	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
25	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
15	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
5	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2

HORIZONTAL (ft)	**330**	**340**	**350**	**360**	**370**	**380**	**390**	**400**	**410**	**420**	**430**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**440**	**450**	**460**	**470**	**480**	**490**	**500**	**510**	**520**	**530**	**540**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**550**	**560**	**570**	**580**	**590**	**600**	**610**	**620**	**630**	**640**	**650**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**660**	**670**	**680**	**690**	**700**	**710**	**720**	**730**	**740**	**750**	**760**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**770**	**780**	**790**	**800**	**810**	**820**	**830**	**840**	**850**	**860**	**870**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**880**	**890**	**900**	**910**	**920**	**930**	**940**	**950**	**960**	**970**	**980**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**990**	**1000**	**1010**	**1020**	**1030**	**1040**	**1050**	**1060**	**1070**	**1080**	**1090**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1100**	**1110**	**1120**	**1130**	**1140**	**1150**	**1160**	**1170**	**1180**	**1190**	**1200**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1210**	**1220**	**1230**	**1240**	**1250**	**1260**	**1270**	**1280**	**1290**	**1300**	**1310**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1320**	**1330**	**1340**	**1350**	**1360**	**1370**	**1380**	**1390**	**1400**	**1410**	**1420**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3
35	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1430**	**1440**	**1450**	**1460**	**1470**	**1480**	**1490**	**1500**	**1510**	**1520**	**1530**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1540**	**1550**	**1560**	**1570**	**1580**	**1590**	**1600**	**1610**	**1620**	**1630**	**1640**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1650**	**1660**	**1670**	**1680**	**1690**	**1700**	**1710**	**1720**	**1730**	**1740**	**1750**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1760**	**1770**	**1780**	**1790**	**1800**	**1810**	**1820**	**1830**	**1840**	**1850**	**1860**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1870**	**1880**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
5	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**2090**	**2100**	**2110**	**2120**	**2130**	**2140**	**2150**	**2160**	**2170**	**2180**	**2190**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**2200**	**2210**	**2220**	**2230**	**2240**	**2250**	**2260**	**2270**	**2280**	**2290**	**2300**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**2310**	**2320**	**2330**	**2340**	**2350**	**2360**	**2370**	**2380**	**2390**	**2400**	**2410**
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3
25	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**2420**	**2430**	**2440**	**2450**	**2460**	**2470**
55	0.3	0.3	0.3	0.3	0.3	0.3
45	0.2	0.3	0.3	0.2	0.2	0.3
35	0.2	0.3	0.3	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2

Vertical Plane VPS1

HORIZONTAL (ft)	**0**	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	110	120	130	140	150	160	170	180	190	200	210
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1

HORIZONTAL (ft)	220	230	240	250	260	270	280	290	300	310	320
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
35	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
25	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
15	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
5	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2

HORIZONTAL (ft)	330	340	350	360	370	380	390	400	410	420	430
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	440	450	460	470	480	490	500	510	520	530	540
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**550**	**560**	**570**	**580**	**590**	**600**	**610**	**620**	**630**	**640**	**650**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**660**	**670**	**680**	**690**	**700**	**710**	**720**	**730**	**740**	**750**	**760**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**770**	**780**	**790**	**800**	**810**	**820**	**830**	**840**	**850**	**860**	**870**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**880**	**890**	**900**	**910**	**920**	**930**	**940**	**950**	**960**	**970**	**980**

95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**990**	**1000**	**1010**	**1020**	**1030**	**1040**	**1050**	**1060**	**1070**	**1080**	**1090**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1100**	**1110**	**1120**	**1130**	**1140**	**1150**	**1160**	**1170**	**1180**	**1190**	**1200**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1210**	**1220**	**1230**	**1240**	**1250**	**1260**	**1270**	**1280**	**1290**	**1300**	**1310**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1320**	**1330**	**1340**	**1350**	**1360**	**1370**	**1380**	**1390**	**1400**	**1410**	**1420**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1430**	**1440**	**1450**	**1460**	**1470**	**1480**	**1490**	**1500**	**1510**	**1520**	**1530**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
45	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0	0
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1540**	**1550**	**1560**	**1570**	**1580**	**1590**	**1600**	**1610**	**1620**	**1630**	**1640**
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1650**	**1660**	**1670**	**1680**	**1690**	**1700**	**1710**	**1720**	**1730**	**1740**	**1750**
95	0.1	0.1	0.1	0.1	0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.1	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0

75	0.1	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
65	0	0	0.1	0	0	0.0	0.0	0.0	0.0	0.0	0.0
55	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.1	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.1	0	0	0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
25	0.1	0.1	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.1	0.1	0.1	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.1	0.1	0.1	0.1	0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1760**	**1770**	**1780**	**1790**	**1800**	**1810**	**1820**	**1830**	**1840**	**1850**	**1860**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1870**	**1880**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX G: Project Signs Lighting Illuminance Light Trespass Calculation (fc)

Project Signs Lighting illuminance data presented below is derived from the lighting illuminance calculations prepared as per the methods described in Section 6.2 above. Illuminance data is presented in the following tables with location coordinates defined relative to the elevation and horizontal distance from lower left, viewing from the Property to the vertical plane where Light Trespass illuminance is under review. Grid data is displayed at ten feet on center, vertical and horizontal.

Vertical Plane VPE1

HORIZONTAL (ft)	0	10	20	30	40	50	60	70	80	90	100
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	110	120	130	140	150	160	170	180	190	200	210
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**220**	**230**	**240**	**250**	**260**	**270**	**280**	**290**	**300**	**310**	**320**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**330**	**340**	**350**	**360**	**370**	**380**	**390**	**400**	**410**	**420**	**430**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**440**	**450**	**460**	**470**	**480**	**490**	**500**	**510**	**520**	**530**	**540**
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**550**	**560**	**570**	**580**	**590**	**600**	**610**	**620**	**630**	**640**	**650**
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
35	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
25	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
15	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**660**	**670**	**680**	**690**	**700**	**710**	**720**	**730**	**740**	**750**	**760**
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0

35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**770**	**780**	**790**	**800**	**810**	**820**	**830**	**840**	**850**	**860**	**870**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**880**	**890**	**900**	**910**	**920**	**930**	**940**	**950**	**960**	**970**	**980**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**990**	**1000**	**1010**	**1020**	**1030**	**1040**	**1050**	**1060**	**1070**	**1080**	**1090**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1100**	**1110**	**1120**	**1130**	**1140**	**1150**	**1160**	**1170**	**1180**	**1190**	**1200**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1210**	**1220**	**1230**	**1240**	**1250**	**1260**	**1270**	**1280**	**1290**	**1300**	**1310**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1320**	**1330**	**1340**	**1350**	**1360**	**1370**	**1380**	**1390**	**1400**	**1410**	**1420**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1430**	**1440**	**1450**	**1460**	**1470**	**1480**	**1490**	**1500**	**1510**	**1520**	**1530**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1540**	**1550**	**1560**	**1570**	**1580**	**1590**	**1600**	**1610**	**1620**	**1630**	**1640**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
45	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
35	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
25	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
15	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1650**	**1660**	**1670**	**1680**	**1690**	**1700**	**1710**	**1720**	**1730**	**1740**	**1750**
55	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
45	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1760**	**1770**	**1780**	**1790**	**1800**	**1810**	**1820**	**1830**	**1840**	**1850**	**1860**
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

35	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
15	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

HORIZONTAL (ft)	**1870**	**1880**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**
55	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

HORIZONTAL (ft)	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
55	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL	**2090**	**2100**	**2110**	**2120**	**2130**	**2140**	**2150**	**2160**	**2170**	**2180**	**2190**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2200**	**2210**	**2220**	**2230**	**2240**	**2250**	**2260**	**2270**	**2280**	**2290**	**2300**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2310**	**2320**	**2330**	**2340**	**2350**	**2360**	**2370**	**2380**	**2390**	**2400**	**2410**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2420**	**2430**	**2440**	**2450**	**2460**	**2470**	**2480**	**2490**	**2500**	**2510**	**2520**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2530**	**2540**	**2550**	**2560**	**2570**	**2580**	**2590**	**2600**	**2610**	**2620**	**2630**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2640**	**2650**	**2660**	**2670**	**2680**	**2690**	**2700**	**2710**	**2720**	**2730**	**2740**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2750**	**2760**	**2770**	**2780**	**2790**	**2800**	**2810**	**2820**	**2830**	**2840**	**2850**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2860**	**2870**	**2880**	**2890**	**2900**	**2910**	**2920**	**2930**	**2940**	**2950**	**2960**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2970**	**2980**	**2990**	**3000**	**3010**	**3020**	**3030**	**3040**	**3050**	**3060**	**3070**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**3080**	**3090**	**3100**	**3110**	**3120**	**3130**	**3140**	**3150**	**3160**	**3170**	**3180**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**3190**	**3200**	**3210**	**3220**	**3230**
55	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0

Vertical Plane VPN1

HORIZONTAL (ft)	**0**	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**	**210**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**220**	**230**	**240**	**250**	**260**	**270**	**280**	**290**	**300**	**310**	**320**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**330**	**340**	**350**	**360**	**370**	**380**	**390**	**400**	**410**	**420**	**430**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**440**	**450**	**460**	**470**	**480**	**490**	**500**	**510**	**520**	**530**	**540**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**550**	**560**	**570**	**580**	**590**	**600**	**610**	**620**	**630**	**640**	**650**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**660**	**670**	**680**	**690**	**700**	**710**	**720**	**730**	**740**	**750**	**760**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**770**	**780**	**790**	**800**	**810**	**820**	**830**	**840**	**850**	**860**	**870**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**880**	**890**	**900**	**910**	**920**	**930**	**940**	**950**	**960**	**970**	**980**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**990**	**1000**	**1010**	**1020**	**1030**	**1040**	**1050**	**1060**	**1070**	**1080**	**1090**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1100**	**1110**	**1120**	**1130**	**1140**	**1150**	**1160**	**1170**	**1180**	**1190**	**1200**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1210**	**1220**	**1230**	**1240**	**1250**	**1260**	**1270**	**1280**	**1290**	**1300**	**1310**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1320**	**1330**	**1340**	**1350**	**1360**	**1370**	**1380**	**1390**	**1400**	**1410**	**1420**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1430**	**1440**	**1450**	**1460**	**1470**	**1480**	**1490**	**1500**	**1510**	**1520**	**1530**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1540**	**1550**	**1560**	**1570**	**1580**	**1590**	**1600**	**1610**	**1620**	**1630**	**1640**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1650**	**1660**	**1670**	**1680**	**1690**	**1700**	**1710**	**1720**	**1730**	**1740**	**1750**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1760**	**1770**	**1780**	**1790**	**1800**	**1810**	**1820**	**1830**	**1840**	**1850**	**1860**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1870**	**1880**	**1890**	**1900**	**1910**	**1920**	**1930**	**1940**	**1950**	**1960**	**1970**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2090**	**2100**	**2110**	**2120**	**2130**	**2140**	**2150**	**2160**	**2170**	**2180**	**2190**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2200**	**2210**	**2220**	**2230**	**2240**	**2250**	**2260**	**2270**	**2280**	**2290**	**2300**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2310**	**2320**	**2330**	**2340**	**2350**	**2360**	**2370**	**2380**	**2390**	**2400**	**2410**
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**2420**	**2430**	**2440**	**2450**	**2460**	**2470**
55	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0

Vertical Plane VPS1

HORIZONTAL (ft)	**0**	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**110**	**120**	**130**	**140**	**150**	**160**	**170**	**180**	**190**	**200**	**210**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**220**	**230**	**240**	**250**	**260**	**270**	**280**	**290**	**300**	**310**	**320**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**330**	**340**	**350**	**360**	**370**	**380**	**390**	**400**	**410**	**420**	**430**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**440**	**450**	**460**	**470**	**480**	**490**	**500**	**510**	**520**	**530**	**540**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**550**	**560**	**570**	**580**	**590**	**600**	**610**	**620**	**630**	**640**	**650**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**660**	**670**	**680**	**690**	**700**	**710**	**720**	**730**	**740**	**750**	**760**

95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**770**	**780**	**790**	**800**	**810**	**820**	**830**	**840**	**850**	**860**	**870**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**880**	**890**	**900**	**910**	**920**	**930**	**940**	**950**	**960**	**970**	**980**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**990**	**1000**	**1010**	**1020**	**1030**	**1040**	**1050**	**1060**	**1070**	**1080**	**1090**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1100**	**1110**	**1120**	**1130**	**1140**	**1150**	**1160**	**1170**	**1180**	**1190**	**1200**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1210**	**1220**	**1230**	**1240**	**1250**	**1260**	**1270**	**1280**	**1290**	**1300**	**1310**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1320**	**1330**	**1340**	**1350**	**1360**	**1370**	**1380**	**1390**	**1400**	**1410**	**1420**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1430**	**1440**	**1450**	**1460**	**1470**	**1480**	**1490**	**1500**	**1510**	**1520**	**1530**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1540**	**1550**	**1560**	**1570**	**1580**	**1590**	**1600**	**1610**	**1620**	**1630**	**1640**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1650**	**1660**	**1670**	**1680**	**1690**	**1700**	**1710**	**1720**	**1730**	**1740**	**1750**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	**1760**	**1770**	**1780**	**1790**	**1800**	**1810**	**1820**	**1830**	**1840**	**1850**	**1860**
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HORIZONTAL (ft)	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300
95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX C

Air Quality Data Sheets

Kimmelman Project - Existing Victoria Links Golf Course

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Golf Course	87.00	Acre	87.00	3,789,720.00	0
Health Club	17.70	1000sqft	0.00	17,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2000
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year - 2000.

Land Use - Lot Acreage accounted for in the Golf Course land use.

Construction Phase - No construction. Estimating existing operational emissions only.

Off-road Equipment - No Construction.

Trips and VMT - No construction.

Grading - No Construction.

Vehicle Trips - Trip Generation rates are based on daily trips for the existing golf course from the project's traffic study.

Energy Use - CalEEMod Defaults

Water And Wastewater - Existing water use data provided by the projet applicant.

Off-road Equipment - No Construction use

Off-road Equipment - No Construction use

Off-road Equipment - No Construction activity

Off-road Equipment - No construction activity

Off-road Equipment - No construction activity

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	1,550.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	155.00	0.00
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	60.00	0.00
tblConstructionPhase	PhaseEndDate	3/26/2027	10/23/2026
tblConstructionPhase	PhaseEndDate	5/22/2026	6/12/2020
tblConstructionPhase	PhaseEndDate	8/16/2019	3/31/2019
tblConstructionPhase	PhaseEndDate	6/12/2020	11/8/2019
tblConstructionPhase	PhaseEndDate	10/23/2026	5/22/2026
tblConstructionPhase	PhaseEndDate	11/8/2019	8/16/2019
tblLandUse	LotAcreage	0.41	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	VendorTripNumber	624.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,599.00	0.00
tblTripsAndVMT	WorkerTripNumber	320.00	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	SU_TR	5.88	5.82
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	WD_TR	5.04	3.74
tblVehicleTrips	WD_TR	32.93	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Energy	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Mobile	6.4678	15.7604	81.6542	0.1046	2.6229	0.4052	3.0281	0.7022	0.3844	1.0865		4,001.9009	4,001.9009	0.6600		4,018.4005

Total	**7.1380**	**15.8466**	**81.7454**	**0.1052**	**2.6229**	**0.4118**	**3.0347**	**0.7022**	**0.3910**	**1.0931**		**4,105.1857**	**4,105.1857**	**0.6621**	**1.8900e-003**	**4,122.3029**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Energy	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Mobile	6.4678	15.7604	81.6542	0.1046	2.6229	0.4052	3.0281	0.7022	0.3844	1.0865		4,001.9009	4,001.9009	0.6600		4,018.4005
Total	**7.1380**	**15.8466**	**81.7454**	**0.1052**	**2.6229**	**0.4118**	**3.0347**	**0.7022**	**0.3910**	**1.0931**		**4,105.1857**	**4,105.1857**	**0.6621**	**1.8900e-003**	**4,122.3029**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Site Preparation	Site Preparation	8/17/2019	8/16/2019	5	0	
3	Grading	Grading	11/9/2019	11/8/2019	5	0	
4	Building Construction	Building Construction	6/13/2020	6/12/2020	5	0	
5	Paving	Paving	5/23/2026	5/22/2026	5	0	
6	Architectural Coating	Architectural Coating	10/24/2026	10/23/2026	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,550; Non-Residential Outdoor: 8,850; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Grading		0			

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class

Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.4678	15.7604	81.6542	0.1046	2.6229	0.4052	3.0281	0.7022	0.3844	1.0865		4,001.9009	4,001.9009	0.6600		4,018.4005
Unmitigated	6.4678	15.7604	81.6542	0.1046	2.6229	0.4052	3.0281	0.7022	0.3844	1.0865		4,001.9009	4,001.9009	0.6600		4,018.4005

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	325.38	506.34	506.34	918,390	918,390
Health Club	0.00	0.00	0.00		
Total	325.38	506.34	506.34	918,390	918,390

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Golf Course	0.563301	0.087805	0.177371	0.086750	0.024607	0.005004	0.019215	0.027860	0.001385	0.001867	0.001946	0.000664	0.002226
Health Club	0.563301	0.087805	0.177371	0.086750	0.024607	0.005004	0.019215	0.027860	0.001385	0.001867	0.001946	0.000664	0.002226

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
NaturalGas Unmitigated	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	877.726	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Total		**9.4700e-003**	**0.0861**	**0.0723**	**5.2000e-004**		**6.5400e-003**	**6.5400e-003**		**6.5400e-003**	**6.5400e-003**		**103.2619**	**103.2619**	**1.9800e-003**	**1.8900e-003**	**103.8755**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0.877726	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Total		**9.4700e-003**	**0.0861**	**0.0723**	**5.2000e-004**		**6.5400e-003**	**6.5400e-003**		**6.5400e-003**	**6.5400e-003**		**103.2619**	**103.2619**	**1.9800e-003**	**1.8900e-003**	**103.8755**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Unmitigated	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5457					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6600e-003	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Total	**0.6608**	**1.4000e-004**	**0.0190**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0229**	**0.0229**	**1.6000e-004**		**0.0268**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5457					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6600e-003	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Total	**0.6608**	**1.4000e-004**	**0.0190**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0229**	**0.0229**	**1.6000e-004**		**0.0268**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Kimmelman Project - Existing Victoria Links Golf Course

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Golf Course	87.00	Acre	87.00	3,789,720.00	0
Health Club	17.70	1000sqft	0.00	17,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2000
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year - 2000.

Land Use - Lot Acreage accounted for in the Golf Course land use.

Construction Phase - No construction. Estimating existing operational emissions only.

Off-road Equipment - No Construction.

Trips and VMT - No construction.

Grading - No Construction.

Vehicle Trips - Trip Generation rates are based on daily trips for the existing golf course from the project's traffic study.

Energy Use - CalEEMod Defaults

Water And Wastewater - Existing water use data provided by the projet applicant.

Off-road Equipment - No Construction use

Off-road Equipment - No Construction use

Off-road Equipment - No Construction activity

Off-road Equipment - No construction activity

Off-road Equipment - No construction activity

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	1,550.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	155.00	0.00
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	60.00	0.00
tblConstructionPhase	PhaseEndDate	3/26/2027	10/23/2026
tblConstructionPhase	PhaseEndDate	5/22/2026	6/12/2020
tblConstructionPhase	PhaseEndDate	8/16/2019	3/31/2019
tblConstructionPhase	PhaseEndDate	6/12/2020	11/8/2019
tblConstructionPhase	PhaseEndDate	10/23/2026	5/22/2026
tblConstructionPhase	PhaseEndDate	11/8/2019	8/16/2019
tblLandUse	LotAcreage	0.41	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	VendorTripNumber	624.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,599.00	0.00
tblTripsAndVMT	WorkerTripNumber	320.00	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	SU_TR	5.88	5.82
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	WD_TR	5.04	3.74
tblVehicleTrips	WD_TR	32.93	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Energy	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Mobile	6.5664	16.6323	79.2976	0.1009	2.6229	0.4244	3.0473	0.7022	0.4028	1.1049		3,810.1554	3,810.1554	0.6516		3,826.4464

Total	**7.2366**	**16.7185**	**79.3889**	**0.1014**	**2.6229**	**0.4311**	**3.0540**	**0.7022**	**0.4094**	**1.1115**		**3,913.4402**	**3,913.4402**	**0.6538**	**1.8900e-003**	**3,930.3487**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Energy	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Mobile	6.5664	16.6323	79.2976	0.1009	2.6229	0.4244	3.0473	0.7022	0.4028	1.1049		3,810.1554	3,810.1554	0.6516		3,826.4464
Total	**7.2366**	**16.7185**	**79.3889**	**0.1014**	**2.6229**	**0.4311**	**3.0540**	**0.7022**	**0.4094**	**1.1115**		**3,913.4402**	**3,913.4402**	**0.6538**	**1.8900e-003**	**3,930.3487**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Site Preparation	Site Preparation	8/17/2019	8/16/2019	5	0	
3	Grading	Grading	11/9/2019	11/8/2019	5	0	
4	Building Construction	Building Construction	6/13/2020	6/12/2020	5	0	
5	Paving	Paving	5/23/2026	5/22/2026	5	0	
6	Architectural Coating	Architectural Coating	10/24/2026	10/23/2026	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,550; Non-Residential Outdoor: 8,850; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Grading		0			

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class

Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5664	16.6323	79.2976	0.1009	2.6229	0.4244	3.0473	0.7022	0.4028	1.1049		3,810.1554	3,810.1554	0.6516		3,826.4464
Unmitigated	6.5664	16.6323	79.2976	0.1009	2.6229	0.4244	3.0473	0.7022	0.4028	1.1049		3,810.1554	3,810.1554	0.6516		3,826.4464

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	325.38	506.34	506.34	918,390	918,390
Health Club	0.00	0.00	0.00		
Total	325.38	506.34	506.34	918,390	918,390

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Golf Course	0.563301	0.087805	0.177371	0.086750	0.024607	0.005004	0.019215	0.027860	0.001385	0.001867	0.001946	0.000664	0.002226
Health Club	0.563301	0.087805	0.177371	0.086750	0.024607	0.005004	0.019215	0.027860	0.001385	0.001867	0.001946	0.000664	0.002226

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
NaturalGas Unmitigated	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	877.726	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Total		**9.4700e-003**	**0.0861**	**0.0723**	**5.2000e-004**		**6.5400e-003**	**6.5400e-003**		**6.5400e-003**	**6.5400e-003**		**103.2619**	**103.2619**	**1.9800e-003**	**1.8900e-003**	**103.8755**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0.877726	9.4700e-003	0.0861	0.0723	5.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003		103.2619	103.2619	1.9800e-003	1.8900e-003	103.8755
Total		**9.4700e-003**	**0.0861**	**0.0723**	**5.2000e-004**		**6.5400e-003**	**6.5400e-003**		**6.5400e-003**	**6.5400e-003**		**103.2619**	**103.2619**	**1.9800e-003**	**1.8900e-003**	**103.8755**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Unmitigated	0.6607	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5457					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6600e-003	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Total	**0.6608**	**1.4000e-004**	**0.0190**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0229**	**0.0229**	**1.6000e-004**		**0.0268**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5457					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6600e-003	1.4000e-004	0.0190	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0229	0.0229	1.6000e-004		0.0268
Total	**0.6608**	**1.4000e-004**	**0.0190**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**		**0.0229**	**0.0229**	**1.6000e-004**		**0.0268**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Kimmelman Foundation Center

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.00	1000sqft	0.53	23,000.00	0
General Office Building	10.00	1000sqft	0.23	10,000.00	0
General Office Building	3.00	1000sqft	0.07	3,000.00	0
General Office Building	13.00	1000sqft	0.30	13,000.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Library	25.00	1000sqft	0.57	25,000.00	0
Other Asphalt Surfaces	29.00	Acre	29.00	1,263,240.00	0
Other Non-Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	1,193.00	Space	10.74	477,200.00	0
City Park	58.00	Acre	58.00	2,526,480.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	588.29	**CH4 Intensity (lb/MWhr)**	0.024	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year 2021. CO2 and CH4. Intensity factors based on SCE RPS data for 2021.

Land Use - Proposed land use data was provided by the project applicant.

Construction Phase - Construction phasing was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

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Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Trips and VMT - Construction trip data provided by the project applicant.

Grading - CalEEMod defaults.

Vehicle Trips - Weekday and weekend trip rates are based on the trip generation values identified in the proposed project's traffic report.

Area Coating - Parking lot area provided by the project applicant.

Energy Use - Additional energy use from outdoor lighting was captured under the parking lot land use.

Water And Wastewater - Water use based in information from the project applicant.

Construction Off-road Equipment Mitigation - Use of Tier 4 final engines in construction equipment over 75 hoursepower and compliance with SCAQMD Rule 402.

Water Mitigation - NA

Waste Mitigation - In compliance with AB 341

Fleet Mix - CalEEMod defaults.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	107,040.00	104,426.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	44.00
tblConstructionPhase	NumDays	3,100.00	132.00
tblConstructionPhase	NumDays	310.00	65.00
tblConstructionPhase	NumDays	310.00	45.00

tblConstructionPhase	NumDays	310.00	45.00
tblConstructionPhase	NumDays	220.00	153.00
tblConstructionPhase	NumDays	120.00	67.00
tblEnergyUse	LightingElect	0.00	0.32
tblEnergyUse	LightingElect	0.00	0.89
tblOffRoadEquipment	HorsePower	231.00	429.00
tblOffRoadEquipment	HorsePower	231.00	430.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	0.00
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tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	702.44	588.29
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripNumber	0.00	10,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	132.00
tblTripsAndVMT	HaulingTripNumber	0.00	10,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	621.00
tblTripsAndVMT	HaulingTripNumber	0.00	460.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	44.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	719.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	1,838.00	50.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	368.00	30.00
tblVehicleTrips	CC_TTP	0.00	43.00
tblVehicleTrips	CC_TTP	0.00	43.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	52.00
tblVehicleTrips	CW_TTP	0.00	52.00

tblVehicleTrips	DV_TP	0.00	19.00
tblVehicleTrips	DV_TP	0.00	19.00
tblVehicleTrips	PB_TP	0.00	4.00
tblVehicleTrips	PB_TP	0.00	4.00
tblVehicleTrips	PR_TP	0.00	77.00
tblVehicleTrips	PR_TP	0.00	77.00
tblVehicleTrips	ST_TR	22.75	74.14
tblVehicleTrips	ST_TR	2.46	0.22
tblVehicleTrips	ST_TR	46.55	13.84
tblVehicleTrips	ST_TR	0.00	59.48
tblVehicleTrips	ST_TR	0.00	724.00
tblVehicleTrips	SU_TR	16.74	74.14
tblVehicleTrips	SU_TR	1.05	0.22
tblVehicleTrips	SU_TR	25.49	13.84
tblVehicleTrips	SU_TR	0.00	59.48
tblVehicleTrips	SU_TR	0.00	724.00
tblVehicleTrips	WD_TR	1.89	12.29
tblVehicleTrips	WD_TR	11.03	1.02
tblVehicleTrips	WD_TR	56.24	43.80
tblVehicleTrips	WD_TR	0.00	64.83
tblVehicleTrips	WD_TR	0.00	396.00
tblWater	IndoorWaterUseRate	9,597,622.39	9,500,000.00
tblWater	IndoorWaterUseRate	782,222.71	500,000.00
tblWater	OutdoorWaterUseRate	69,105,918.28	11,516,480.00
tblWater	OutdoorWaterUseRate	0.00	1,084,050.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	17.7903	238.1442	121.8000	0.4321	33.6767	8.0109	41.6877	15.4993	7.4094	22.9087	0.0000	45,049.3772	45,049.3772	6.6491	0.0000	45,215.6037
2020	30.7718	56.0792	53.5272	0.0951	1.2636	2.8627	4.1263	0.3356	2.6637	2.9993	0.0000	9,232.8486	9,232.8486	2.2299	0.0000	9,288.5963
Maximum	**30.7718**	**238.1442**	**121.8000**	**0.4321**	**33.6767**	**8.0109**	**41.6877**	**15.4993**	**7.4094**	**22.9087**	**0.0000**	**45,049.3772**	**45,049.3772**	**6.6491**	**0.0000**	**45,215.6037**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.0949	110.4768	121.8138	0.4321	17.6890	0.6261	18.3152	7.2826	0.6095	7.8921	0.0000	45,049.3772	45,049.3772	6.6491	0.0000	45,215.6037
2020	29.0680	13.1229	54.2943	0.0951	1.2636	0.1395	1.4031	0.3356	0.1385	0.4741	0.0000	9,232.8486	9,232.8486	2.2299	0.0000	9,288.5963
Maximum	**29.0680**	**110.4768**	**121.8138**	**0.4321**	**17.6890**	**0.6261**	**18.3152**	**7.2826**	**0.6095**	**7.8921**	**0.0000**	**45,049.3772**	**45,049.3772**	**6.6491**	**0.0000**	**45,215.6037**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**27.59**	**57.99**	**-0.45**	**0.00**	**45.76**	**92.96**	**56.96**	**51.89**	**92.57**	**67.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Energy	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829
Mobile	14.4907	72.1727	187.2306	0.6716	53.3145	0.5239	53.8384	14.2653	0.4892	14.7545		68,309.0484	68,309.0484	3.2890		68,391.2736
Total	**17.1966**	**72.4465**	**187.5989**	**0.6732**	**53.3145**	**0.5451**	**53.8596**	**14.2653**	**0.5104**	**14.7757**		**68,636.3855**	**68,636.3855**	**3.2961**	**6.0000e-003**	**68,720.5740**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Energy	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829
Mobile	14.4907	72.1727	187.2306	0.6716	53.3145	0.5239	53.8384	14.2653	0.4892	14.7545		68,309.0484	68,309.0484	3.2890		68,391.2736
Total	**17.1966**	**72.4465**	**187.5989**	**0.6732**	**53.3145**	**0.5451**	**53.8596**	**14.2653**	**0.5104**	**14.7757**		**68,636.3855**	**68,636.3855**	**3.2961**	**6.0000e-003**	**68,720.5740**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Demo/Site prep/C&G	Site Preparation	8/1/2019	11/1/2019	5	67	
2	Trenching	Trenching	8/1/2019	11/1/2019	5	67	
3	Grading	Grading	9/1/2019	11/29/2019	5	65	
4	Building Construction	Building Construction	10/1/2019	4/1/2020	5	132	
5	Sport Surfaces and Paving	Paving	11/1/2019	6/2/2020	5	153	
6	Pile Driving	Grading	12/1/2019	1/31/2020	5	45	
7	Dynamic Compaction	Grading	12/1/2019	1/31/2020	5	45	
8	Architectural Coating	Architectural Coating	5/1/2020	7/1/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 130

Acres of Paving: 40.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,500; Non-Residential Outdoor: 39,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demo/Site prep/C&G	Rubber Tired Dozers	2	8.00	247	0.40
Demo/Site prep/C&G	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Sport Surfaces and Paving	Pavers	2	8.00	130	0.42
Sport Surfaces and Paving	Paving Equipment	2	8.00	132	0.36
Sport Surfaces and Paving	Rollers	2	8.00	80	0.38
Sport Surfaces and Paving	Sweepers/Scrubbers	2	8.00	64	0.46
Pile Driving	Cranes	1	8.00	429	0.29
Pile Driving	Excavators	0	0.00	158	0.38
Pile Driving	Graders	0	0.00	187	0.41
Pile Driving	Rubber Tired Dozers	0	0.00	247	0.40
Pile Driving	Scrapers	0	0.00	367	0.48
Pile Driving	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Pile Driving	Welders	1	8.00	46	0.45
Dynamic Compaction	Cranes	1	8.00	430	0.29
Dynamic Compaction	Excavators	0	0.00	158	0.38
Dynamic Compaction	Graders	0	0.00	187	0.41
Dynamic Compaction	Rubber Tired Dozers	0	0.00	247	0.40
Dynamic Compaction	Scrapers	0	0.00	367	0.48
Dynamic Compaction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demo/Site prep/C&G	5	20.00	0.00	10,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	20.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	10,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	50.00	6.00	621.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sport Surfaces and Paving	8	30.00	0.00	460.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pile Driving	2	6.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Dynamic Compaction	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	2.00	44.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demo/Site prep/C&G - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9676	31.1609	15.4762	0.0264		1.6456	1.6456		1.5139	1.5139		2,613.4826	2,613.4826	0.8269		2,634.1545
Total	**2.9676**	**31.1609**	**15.4762**	**0.0264**	**12.0442**	**1.6456**	**13.6898**	**6.6205**	**1.5139**	**8.1344**		**2,613.4826**	**2,613.4826**	**0.8269**		**2,634.1545**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2877	45.6239	8.7324	0.1229	2.7386	0.1693	2.9078	0.7505	0.1619	0.9124		13,271.0157	13,271.0157	0.9053		13,293.6485
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	**1.3857**	**45.6920**	**9.6311**	**0.1253**	**2.9621**	**0.1710**	**3.1331**	**0.8098**	**0.1635**	**0.9733**		**13,507.2135**	**13,507.2135**	**0.9127**		**13,530.0310**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	0.3230	1.3999	14.6934	0.0264		0.0431	0.0431		0.0431	0.0431	0.0000	2,613.4825	2,613.4825	0.8269		2,634.1545
Total	**0.3230**	**1.3999**	**14.6934**	**0.0264**	**4.6972**	**0.0431**	**4.7403**	**2.5820**	**0.0431**	**2.6251**	**0.0000**	**2,613.4825**	**2,613.4825**	**0.8269**		**2,634.1545**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.2877	45.6239	8.7324	0.1229	2.7386	0.1693	2.9078	0.7505	0.1619	0.9124		13,271.0157	13,271.0157	0.9053		13,293.6485
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	**1.3857**	**45.6920**	**9.6311**	**0.1253**	**2.9621**	**0.1710**	**3.1331**	**0.8098**	**0.1635**	**0.9733**		**13,507.2135**	**13,507.2135**	**0.9127**		**13,530.0310**

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8557	17.8731	16.4100	0.0233		1.1631	1.1631		1.0700	1.0700		2,305.0420	2,305.0420	0.7293		2,323.2743
Total	**1.8557**	**17.8731**	**16.4100**	**0.0233**		**1.1631**	**1.1631**		**1.0700**	**1.0700**		**2,305.0420**	**2,305.0420**	**0.7293**		**2,323.2743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0162	0.5736	0.1098	1.5500e-003	0.0344	2.1300e-003	0.0366	9.4300e-003	2.0400e-003	0.0115		166.8356	166.8356	0.0114		167.1202
Vendor	0.0154	0.4577	0.1106	1.0400e-003	0.0256	3.0300e-003	0.0286	7.3700e-003	2.9000e-003	0.0103		110.4879	110.4879	7.3100e-003		110.6707
Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	**0.1296**	**1.0994**	**1.1191**	**4.9600e-003**	**0.2836**	**6.9000e-003**	**0.2905**	**0.0761**	**6.5400e-003**	**0.0826**		**513.5213**	**513.5213**	**0.0261**		**514.1733**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2856	1.2375	17.6102	0.0233		0.0381	0.0381		0.0381	0.0381	0.0000	2,305.0420	2,305.0420	0.7293		2,323.2743
Total	**0.2856**	**1.2375**	**17.6102**	**0.0233**		**0.0381**	**0.0381**		**0.0381**	**0.0381**	**0.0000**	**2,305.0420**	**2,305.0420**	**0.7293**		**2,323.2743**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0162	0.5736	0.1098	1.5500e-003	0.0344	2.1300e-003	0.0366	9.4300e-003	2.0400e-003	0.0115		166.8356	166.8356	0.0114		167.1202
Vendor	0.0154	0.4577	0.1106	1.0400e-003	0.0256	3.0300e-003	0.0286	7.3700e-003	2.9000e-003	0.0103		110.4879	110.4879	7.3100e-003		110.6707
Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	**0.1296**	**1.0994**	**1.1191**	**4.9600e-003**	**0.2836**	**6.9000e-003**	**0.2905**	**0.0761**	**6.5400e-003**	**0.0826**		**513.5213**	**513.5213**	**0.0261**		**514.1733**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					14.1652	0.0000	14.1652	6.8495	0.0000	6.8495			0.0000			0.0000
Off-Road	4.8653	54.6513	29.2964	0.0536		2.5015	2.5015		2.3014	2.3014		5,305.5697	5,305.5697	1.6786		5,347.5353
Total	**4.8653**	**54.6513**	**29.2964**	**0.0536**	**14.1652**	**2.5015**	**16.6667**	**6.8495**	**2.3014**	**9.1509**		**5,305.5697**	**5,305.5697**	**1.6786**		**5,347.5353**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3274	47.0277	9.0011	0.1267	2.8228	0.1745	2.9973	0.7736	0.1669	0.9405		13,679.3546	13,679.3546	0.9332		13,702.6838
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	**1.4008**	**47.0788**	**9.6751**	**0.1285**	**2.9905**	**0.1758**	**3.1663**	**0.8181**	**0.1681**	**0.9862**		**13,856.5030**	**13,856.5030**	**0.9387**		**13,879.9707**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5244	0.0000	5.5244	2.6713	0.0000	2.6713			0.0000			0.0000
Off-Road	0.6579	2.8509	26.0218	0.0536		0.0877	0.0877		0.0877	0.0877	0.0000	5,305.5697	5,305.5697	1.6786		5,347.5353
Total	**0.6579**	**2.8509**	**26.0218**	**0.0536**	**5.5244**	**0.0877**	**5.6121**	**2.6713**	**0.0877**	**2.7590**	**0.0000**	**5,305.5697**	**5,305.5697**	**1.6786**		**5,347.5353**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	1.3274	47.0277	9.0011	0.1267	2.8228	0.1745	2.9973	0.7736	0.1669	0.9405		13,679.3546	13,679.3546	0.9332		13,702.6838
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	**1.4008**	**47.0788**	**9.6751**	**0.1285**	**2.9905**	**0.1758**	**3.1663**	**0.8181**	**0.1681**	**0.9862**		**13,856.5030**	**13,856.5030**	**0.9387**		**13,879.9707**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	2.0016	17.1844	17.3429	0.0252		1.1005	1.1005		1.0385	1.0385		2,424.2381	2,424.2381	0.5784		2,438.6979
Total	**2.0016**	**17.1844**	**17.3429**	**0.0252**		**1.1005**	**1.1005**		**1.0385**	**1.0385**		**2,424.2381**	**2,424.2381**	**0.5784**		**2,438.6979**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0387	1.3696	0.2621	3.6900e-003	0.1444	5.0800e-003	0.1495	0.0378	4.8600e-003	0.0427		398.3890	398.3890	0.0272		399.0684
Vendor	0.0231	0.6865	0.1660	1.5600e-003	0.0384	4.5500e-003	0.0430	0.0111	4.3500e-003	0.0154		165.7318	165.7318	0.0110		166.0060
Worker	0.2449	0.1704	2.2467	5.9300e-003	0.5589	4.3500e-003	0.5632	0.1482	4.0100e-003	0.1522		590.4945	590.4945	0.0185		590.9562

Total	**0.3067**	**2.2266**	**2.6748**	**0.0112**	**0.7417**	**0.0140**	**0.7557**	**0.1971**	**0.0132**	**0.2103**		**1,154.6153**	**1,154.6153**	**0.0566**		**1,156.0306**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3485	3.8535	17.7348	0.0252		0.0380	0.0380		0.0380	0.0380	0.0000	2,424.2381	2,424.2381	0.5784		2,438.6978
Total	**0.3485**	**3.8535**	**17.7348**	**0.0252**		**0.0380**	**0.0380**		**0.0380**	**0.0380**	**0.0000**	**2,424.2381**	**2,424.2381**	**0.5784**		**2,438.6978**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0387	1.3696	0.2621	3.6900e-003	0.1444	5.0800e-003	0.1495	0.0378	4.8600e-003	0.0427		398.3890	398.3890	0.0272		399.0684
Vendor	0.0231	0.6865	0.1660	1.5600e-003	0.0384	4.5500e-003	0.0430	0.0111	4.3500e-003	0.0154		165.7318	165.7318	0.0110		166.0060
Worker	0.2449	0.1704	2.2467	5.9300e-003	0.5589	4.3500e-003	0.5632	0.1482	4.0100e-003	0.1522		590.4945	590.4945	0.0185		590.9562
Total	**0.3067**	**2.2266**	**2.6748**	**0.0112**	**0.7417**	**0.0140**	**0.7557**	**0.1971**	**0.0132**	**0.2103**		**1,154.6153**	**1,154.6153**	**0.0566**		**1,156.0306**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8023	15.7557	17.1861	0.0252		0.9512	0.9512		0.8978	0.8978		2,389.3618	2,389.3618	0.5699		2,403.6096
Total	**1.8023**	**15.7557**	**17.1861**	**0.0252**		**0.9512**	**0.9512**		**0.8978**	**0.8978**		**2,389.3618**	**2,389.3618**	**0.5699**		**2,403.6096**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0357	1.2803	0.2548	3.6500e-003	0.1444	4.1300e-003	0.1485	0.0378	3.9500e-003	0.0417		394.3958	394.3958	0.0265		395.0574
Vendor	0.0197	0.6296	0.1499	1.5400e-003	0.0384	3.1200e-003	0.0415	0.0111	2.9800e-003	0.0140		164.6691	164.6691	0.0103		164.9275
Worker	0.2262	0.1521	2.0441	5.7400e-003	0.5589	4.2400e-003	0.5631	0.1482	3.9000e-003	0.1521		572.2087	572.2087	0.0165		572.6200
Total	**0.2817**	**2.0620**	**2.4488**	**0.0109**	**0.7417**	**0.0115**	**0.7532**	**0.1971**	**0.0108**	**0.2079**		**1,131.2736**	**1,131.2736**	**0.0533**		**1,132.6050**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.3485	3.8535	17.7348	0.0252		0.0380	0.0380		0.0380	0.0380	0.0000	2,389.3618	2,389.3618	0.5699		2,403.6096
Total	**0.3485**	**3.8535**	**17.7348**	**0.0252**		**0.0380**	**0.0380**		**0.0380**	**0.0380**	**0.0000**	**2,389.3618**	**2,389.3618**	**0.5699**		**2,403.6096**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0357	1.2803	0.2548	3.6500e-003	0.1444	4.1300e-003	0.1485	0.0378	3.9500e-003	0.0417		394.3958	394.3958	0.0265		395.0574
Vendor	0.0197	0.6296	0.1499	1.5400e-003	0.0384	3.1200e-003	0.0415	0.0111	2.9800e-003	0.0140		164.6691	164.6691	0.0103		164.9275
Worker	0.2262	0.1521	2.0441	5.7400e-003	0.5589	4.2400e-003	0.5631	0.1482	3.9000e-003	0.1521		572.2087	572.2087	0.0165		572.6200
Total	**0.2817**	**2.0620**	**2.4488**	**0.0109**	**0.7417**	**0.0115**	**0.7532**	**0.1971**	**0.0108**	**0.2079**		**1,131.2736**	**1,131.2736**	**0.0533**		**1,132.6050**

3.6 Sport Surfaces and Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0252	20.2002	18.6588	0.0279		1.2267	1.2267		1.1286	1.1286		2,760.2965	2,760.2965	0.8733		2,782.1297
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7057**	**20.2002**	**18.6588**	**0.0279**		**1.2267**	**1.2267**		**1.1286**	**1.1286**		**2,760.2965**	**2,760.2965**	**0.8733**		**2,782.1297**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0247	0.8753	0.1675	2.3600e-003	0.1542	3.2500e-003	0.1575	0.0394	3.1100e-003	0.0425		254.5986	254.5986	0.0174		255.0328
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1469	0.1022	1.3480	3.5600e-003	0.3353	2.6100e-003	0.3379	0.0889	2.4000e-003	0.0913		354.2967	354.2967	0.0111		354.5737
Total	**0.1716**	**0.9775**	**1.5155**	**5.9200e-003**	**0.4896**	**5.8600e-003**	**0.4954**	**0.1283**	**5.5100e-003**	**0.1338**		**608.8953**	**608.8953**	**0.0285**		**609.6066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4051	4.0608	21.1380	0.0279		0.0457	0.0457		0.0457	0.0457	0.0000	2,760.2965	2,760.2965	0.8733		2,782.1297
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0856**	**4.0608**	**21.1380**	**0.0279**		**0.0457**	**0.0457**		**0.0457**	**0.0457**	**0.0000**	**2,760.2965**	**2,760.2965**	**0.8733**		**2,782.1297**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0247	0.8753	0.1675	2.3600e-003	0.1542	3.2500e-003	0.1575	0.0394	3.1100e-003	0.0425		254.5986	254.5986	0.0174		255.0328
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1469	0.1022	1.3480	3.5600e-003	0.3353	2.6100e-003	0.3379	0.0889	2.4000e-003	0.0913		354.2967	354.2967	0.0111		354.5737
Total	**0.1716**	**0.9775**	**1.5155**	**5.9200e-003**	**0.4896**	**5.8600e-003**	**0.4954**	**0.1283**	**5.5100e-003**	**0.1338**		**608.8953**	**608.8953**	**0.0285**		**609.6066**

3.6 Sport Surfaces and Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.8965	18.7201	18.6268	0.0279		1.1267	1.1267		1.0366	1.0366		2,700.0863	2,700.0863	0.8733		2,721.9178
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5770**	**18.7201**	**18.6268**	**0.0279**		**1.1267**	**1.1267**		**1.0366**	**1.0366**		**2,700.0863**	**2,700.0863**	**0.8733**		**2,721.9178**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0228	0.8182	0.1628	2.3300e-003	0.0681	2.6400e-003	0.0707	0.0182	2.5200e-003	0.0207		252.0467	252.0467	0.0169		252.4695
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720

Total	**0.1586**	**0.9095**	**1.3893**	**5.7800e-003**	**0.4034**	**5.1800e-003**	**0.4086**	**0.1071**	**4.8600e-003**	**0.1120**		**595.3719**	**595.3719**	**0.0268**		**596.0415**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4051	4.0608	21.1380	0.0279		0.0457	0.0457		0.0457	0.0457	0.0000	2,700.0862	2,700.0862	0.8733		2,721.9178
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0856**	**4.0608**	**21.1380**	**0.0279**		**0.0457**	**0.0457**		**0.0457**	**0.0457**	**0.0000**	**2,700.0862**	**2,700.0862**	**0.8733**		**2,721.9178**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0228	0.8182	0.1628	2.3300e-003	0.0681	2.6400e-003	0.0707	0.0182	2.5200e-003	0.0207		252.0467	252.0467	0.0169		252.4695
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.1586**	**0.9095**	**1.3893**	**5.7800e-003**	**0.4034**	**5.1800e-003**	**0.4086**	**0.1071**	**4.8600e-003**	**0.1120**		**595.3719**	**595.3719**	**0.0268**		**596.0415**

3.7 Pile Driving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.1511	11.0518	8.3216	0.0133		0.4794	0.4794		0.4490	0.4490		1,267.5965	1,267.5965	0.3701		1,276.8488
Total	**1.1511**	**11.0518**	**8.3216**	**0.0133**	**0.0000**	**0.4794**	**0.4794**	**0.0000**	**0.4490**	**0.4490**		**1,267.5965**	**1,267.5965**	**0.3701**		**1,276.8488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8300e-003	0.0647	0.0124	1.7000e-004	6.9500e-003	2.4000e-004	7.1900e-003	1.8200e-003	2.3000e-004	2.0500e-003		18.8182	18.8182	1.2800e-003		18.8503
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0205	0.2696	7.1000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.8000e-004	0.0183		70.8593	70.8593	2.2200e-003		70.9147
Total	**0.0312**	**0.0851**	**0.2820**	**8.8000e-004**	**0.0740**	**7.6000e-004**	**0.0748**	**0.0196**	**7.1000e-004**	**0.0203**		**89.6775**	**89.6775**	**3.5000e-003**		**89.7650**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1755	1.5745	6.3241	0.0133		0.0205	0.0205		0.0205	0.0205	0.0000	1,267.5965	1,267.5965	0.3701		1,276.8488
Total	**0.1755**	**1.5745**	**6.3241**	**0.0133**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**1,267.5965**	**1,267.5965**	**0.3701**		**1,276.8488**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8300e-003	0.0647	0.0124	1.7000e-004	6.9500e-003	2.4000e-004	7.1900e-003	1.8200e-003	2.3000e-004	2.0500e-003		18.8182	18.8182	1.2800e-003		18.8503
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0205	0.2696	7.1000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.8000e-004	0.0183		70.8593	70.8593	2.2200e-003		70.9147
Total	**0.0312**	**0.0851**	**0.2820**	**8.8000e-004**	**0.0740**	**7.6000e-004**	**0.0748**	**0.0196**	**7.1000e-004**	**0.0203**		**89.6775**	**89.6775**	**3.5000e-003**		**89.7650**

3.7 Pile Driving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0456	10.0463	7.6044	0.0133		0.4266	0.4266		0.3994	0.3994		1,244.3722	1,244.3722	0.3660		1,253.5227
Total	**1.0456**	**10.0463**	**7.6044**	**0.0133**	**0.0000**	**0.4266**	**0.4266**	**0.0000**	**0.3994**	**0.3994**		**1,244.3722**	**1,244.3722**	**0.3660**		**1,253.5227**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6900e-003	0.0605	0.0120	1.7000e-004	6.6900e-003	1.9000e-004	6.8900e-003	1.7500e-003	1.9000e-004	1.9400e-003		18.6295	18.6295	1.2500e-003		18.6608
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0272	0.0183	0.2453	6.9000e-004	0.0671	5.1000e-004	0.0676	0.0178	4.7000e-004	0.0183		68.6651	68.6651	1.9700e-003		68.7144
Total	**0.0288**	**0.0787**	**0.2573**	**8.6000e-004**	**0.0738**	**7.0000e-004**	**0.0745**	**0.0195**	**6.6000e-004**	**0.0202**		**87.2946**	**87.2946**	**3.2200e-003**		**87.3752**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1755	1.5745	6.3241	0.0133		0.0205	0.0205		0.0205	0.0205	0.0000	1,244.3722	1,244.3722	0.3660		1,253.5227
Total	**0.1755**	**1.5745**	**6.3241**	**0.0133**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**1,244.3722**	**1,244.3722**	**0.3660**		**1,253.5227**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	1.6900e-003	0.0605	0.0120	1.7000e-004	6.6900e-003	1.9000e-004	6.8900e-003	1.7500e-003	1.9000e-004	1.9400e-003		18.6295	18.6295	1.2500e-003		18.6608
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0272	0.0183	0.2453	6.9000e-004	0.0671	5.1000e-004	0.0676	0.0178	4.7000e-004	0.0183		68.6651	68.6651	1.9700e-003		68.7144
Total	**0.0288**	**0.0787**	**0.2573**	**8.6000e-004**	**0.0738**	**7.0000e-004**	**0.0745**	**0.0195**	**6.6000e-004**	**0.0202**		**87.2946**	**87.2946**	**3.2200e-003**		**87.3752**

3.8 Dynamic Compaction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7677	9.4495	6.5297	0.0107		0.3806	0.3806		0.3501	0.3501		1,062.5899	1,062.5899	0.3362		1,070.9947
Total	**0.7677**	**9.4495**	**6.5297**	**0.0107**	**0.0000**	**0.3806**	**0.3806**	**0.0000**	**0.3501**	**0.3501**		**1,062.5899**	**1,062.5899**	**0.3362**		**1,070.9947**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0196	0.0136	0.1797	4.7000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		47.2396	47.2396	1.4800e-003		47.2765

Total	**0.0196**	**0.0136**	**0.1797**	**4.7000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**47.2396**	**47.2396**	**1.4800e-003**		**47.2765**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1320	0.5718	4.8385	0.0107		0.0176	0.0176		0.0176	0.0176	0.0000	1,062.5899	1,062.5899	0.3362		1,070.9947
Total	**0.1320**	**0.5718**	**4.8385**	**0.0107**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**1,062.5899**	**1,062.5899**	**0.3362**		**1,070.9947**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0196	0.0136	0.1797	4.7000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		47.2396	47.2396	1.4800e-003		47.2765
Total	**0.0196**	**0.0136**	**0.1797**	**4.7000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**47.2396**	**47.2396**	**1.4800e-003**		**47.2765**

3.8 Dynamic Compaction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7051	8.4948	5.8510	0.0107		0.3405	0.3405		0.3133	0.3133		1,039.3115	1,039.3115	0.3361		1,047.7148
Total	**0.7051**	**8.4948**	**5.8510**	**0.0107**	**0.0000**	**0.3405**	**0.3405**	**0.0000**	**0.3133**	**0.3133**		**1,039.3115**	**1,039.3115**	**0.3361**		**1,047.7148**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0181	0.0122	0.1635	4.6000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		45.7767	45.7767	1.3200e-003		45.8096
Total	**0.0181**	**0.0122**	**0.1635**	**4.6000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**45.7767**	**45.7767**	**1.3200e-003**		**45.8096**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1320	0.5718	4.8385	0.0107		0.0176	0.0176		0.0176	0.0176	0.0000	1,039.3115	1,039.3115	0.3361		1,047.7148
Total	**0.1320**	**0.5718**	**4.8385**	**0.0107**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**1,039.3115**	**1,039.3115**	**0.3361**		**1,047.7148**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0181	0.0122	0.1635	4.6000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		45.7767	45.7767	1.3200e-003		45.8096
Total	**0.0181**	**0.0122**	**0.1635**	**4.6000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**45.7767**	**45.7767**	**1.3200e-003**		**45.8096**

3.9 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.6442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**27.8864**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.6000e-003	0.2721	0.0542	7.8000e-004	0.0175	8.8000e-004	0.0184	4.7900e-003	8.4000e-004	5.6300e-003		83.8329	83.8329	5.6300e-003		83.9736
Vendor	6.5700e-003	0.2099	0.0500	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6900e-003	9.9000e-004	4.6800e-003		54.8897	54.8897	3.4500e-003		54.9759
Worker	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.1499**	**0.5733**	**1.3306**	**4.7400e-003**	**0.3656**	**4.4600e-003**	**0.3701**	**0.0974**	**4.1700e-003**	**0.1016**		**482.0479**	**482.0479**	**0.0190**		**482.5214**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.6442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**27.6739**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	7.6000e-003	0.2721	0.0542	7.8000e-004	0.0175	8.8000e-004	0.0184	4.7900e-003	8.4000e-004	5.6300e-003		83.8329	83.8329	5.6300e-003		83.9736
Vendor	6.5700e-003	0.2099	0.0500	5.1000e-004	0.0128	1.0400e-003	0.0138	3.6900e-003	9.9000e-004	4.6800e-003		54.8897	54.8897	3.4500e-003		54.9759
Worker	0.1357	0.0912	1.2265	3.4500e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		343.3252	343.3252	9.8700e-003		343.5720
Total	**0.1499**	**0.5733**	**1.3306**	**4.7400e-003**	**0.3656**	**4.4600e-003**	**0.3701**	**0.0974**	**4.1700e-003**	**0.1016**		**482.0479**	**482.0479**	**0.0190**		**482.5214**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Mitigated	14.4907	72.1727	187.2306	0.6716	53.3145	0.5239	53.8384	14.2653	0.4892	14.7545		68,309.0484	68,309.0484	3.2890		68,391.2736
Unmitigated	14.4907	72.1727	187.2306	0.6716	53.3145	0.5239	53.8384	14.2653	0.4892	14.7545		68,309.0484	68,309.0484	3.2890		68,391.2736

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	713.00	4,300.00	4300.00	5,000,757	5,000,757
General Office Building	23.43	5.11	5.11	58,607	58,607
General Office Building	10.19	2.22	2.22	25,481	25,481
General Office Building	3.06	0.67	0.67	7,644	7,644
General Office Building	13.24	2.89	2.89	33,126	33,126
General Office Building	5.09	1.11	1.11	12,741	12,741

Library	1,095.00	346.00	346.00	2,224,248	2,224,248
Other Asphalt Surfaces	1,880.00	1,725.00	1725.00	6,879,471	6,879,471
Other Non-Asphalt Surfaces	396.00	724.00	724.00	1,835,236	1,835,236
Parking Lot	0.00	0.00	0.00		
Total	4,139.00	7,107.00	7,107.00	16,077,311	16,077,311

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Other Asphalt Surfaces	16.60	8.40	6.90	52.00	43.00	5.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	52.00	43.00	5.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Library	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Other Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Other Non-Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Parking Lot	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829
NaturalGas Unmitigated	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	142.603	1.5400e-003	0.0140	0.0117	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003		16.7768	16.7768	3.2000e-004	3.1000e-004	16.8765
General Office Building	285.205	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003		33.5536	33.5536	6.4000e-004	6.2000e-004	33.7530
General Office Building	370.767	4.0000e-003	0.0364	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003		43.6197	43.6197	8.4000e-004	8.0000e-004	43.8789
General Office Building	655.973	7.0700e-003	0.0643	0.0540	3.9000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003		77.1733	77.1733	1.4800e-003	1.4100e-003	77.6319
General Office Building	85.5616	9.2000e-004	8.3900e-003	7.0500e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004		10.0661	10.0661	1.9000e-004	1.8000e-004	10.1259
Library	1239.73	0.0134	0.1215	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003		145.8501	145.8501	2.8000e-003	2.6700e-003	146.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0300**	**0.2725**	**0.2289**	**1.6400e-003**		**0.0207**	**0.0207**		**0.0207**	**0.0207**		**327.0395**	**327.0395**	**6.2700e-003**	**5.9900e-003**	**328.9829**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.142603	1.5400e-003	0.0140	0.0117	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003		16.7768	16.7768	3.2000e-004	3.1000e-004	16.8765
General Office Building	0.285205	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003		33.5536	33.5536	6.4000e-004	6.2000e-004	33.7530
General Office Building	0.370767	4.0000e-003	0.0364	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003		43.6197	43.6197	8.4000e-004	8.0000e-004	43.8789
General Office Building	0.655973	7.0700e-003	0.0643	0.0540	3.9000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003		77.1733	77.1733	1.4800e-003	1.4100e-003	77.6319
General Office Building	0.0855616	9.2000e-004	8.3900e-003	7.0500e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004		10.0661	10.0661	1.9000e-004	1.8000e-004	10.1259
Library	1.23973	0.0134	0.1215	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003		145.8501	145.8501	2.8000e-003	2.6700e-003	146.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0300**	**0.2725**	**0.2289**	**1.6400e-003**		**0.0207**	**0.0207**		**0.0207**	**0.0207**		**327.0395**	**327.0395**	**6.2700e-003**	**5.9900e-003**	**328.9829**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Unmitigated	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0130	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Total	**2.6758**	**1.2800e-003**	**0.1394**	**1.0000e-005**		**5.0000e-004**	**5.0000e-004**		**5.0000e-004**	**5.0000e-004**		**0.2976**	**0.2976**	**7.9000e-004**		**0.3174**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

SubCategory	lb/day										lb/day					
Architectural Coating	0.3366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0130	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Total	**2.6758**	**1.2800e-003**	**0.1394**	**1.0000e-005**		**5.0000e-004**	**5.0000e-004**		**5.0000e-004**	**5.0000e-004**		**0.2976**	**0.2976**	**7.9000e-004**		**0.3174**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Kimmelman Foundation Center

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.00	1000sqft	0.53	23,000.00	0
General Office Building	10.00	1000sqft	0.23	10,000.00	0
General Office Building	3.00	1000sqft	0.07	3,000.00	0
General Office Building	13.00	1000sqft	0.30	13,000.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Library	25.00	1000sqft	0.57	25,000.00	0
Other Asphalt Surfaces	29.00	Acre	29.00	1,263,240.00	0
Other Non-Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	1,193.00	Space	10.74	477,200.00	0
City Park	58.00	Acre	58.00	2,526,480.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	588.29	**CH4 Intensity (lb/MWhr)**	0.024	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year 2021. CO2 and CH4. Intensity factors based on SCE RPS data for 2021.

Land Use - Proposed land use data was provided by the project applicant.

Construction Phase - Construction phasing was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

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Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Trips and VMT - Construction trip data provided by the project applicant.

Grading - CalEEMod defaults.

Vehicle Trips - Week day and weekend trip rates are based on the trip generation values identified in the proposed project's traffic report.

Area Coating - parking lot area provided by the project applicant.

Energy Use - Additional energy use from outdoor lighting was captured under the parking lot land use.

Water And Wastewater - Water use based in information from the project applicant.

Construction Off-road Equipment Mitigation - use of Tier 4 final engines in construction equipment over 75 horsepower and In compliance with SCAQMD Rule 403

Water Mitigation - NA

Waste Mitigation - In compliance with AB 341.

Fleet Mix - CalEEMod defaults.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	107,040.00	104,426.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	220.00	44.00
tblConstructionPhase	NumDays	3,100.00	132.00
tblConstructionPhase	NumDays	310.00	65.00
tblConstructionPhase	NumDays	310.00	45.00
tblConstructionPhase	NumDays	310.00	45.00

tblConstructionPhase	NumDays	220.00	153.00
tblConstructionPhase	NumDays	120.00	67.00
tblEnergyUse	LightingElect	0.00	0.32
tblEnergyUse	LightingElect	0.00	0.89
tblOffRoadEquipment	HorsePower	231.00	429.00
tblOffRoadEquipment	HorsePower	231.00	430.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	702.44	588.29
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripNumber	0.00	10,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	132.00
tblTripsAndVMT	HaulingTripNumber	0.00	10,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	621.00
tblTripsAndVMT	HaulingTripNumber	0.00	460.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	44.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	719.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	1,838.00	50.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	368.00	30.00
tblVehicleTrips	CC_TTP	0.00	43.00
tblVehicleTrips	CC_TTP	0.00	43.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	52.00
tblVehicleTrips	CW_TTP	0.00	52.00
tblVehicleTrips	DV_TP	0.00	19.00

tblVehicleTrips	DV_TP	0.00	19.00
tblVehicleTrips	PB_TP	0.00	4.00
tblVehicleTrips	PB_TP	0.00	4.00
tblVehicleTrips	PR_TP	0.00	77.00
tblVehicleTrips	PR_TP	0.00	77.00
tblVehicleTrips	ST_TR	22.75	74.14
tblVehicleTrips	ST_TR	2.46	0.22
tblVehicleTrips	ST_TR	46.55	13.84
tblVehicleTrips	ST_TR	0.00	59.48
tblVehicleTrips	ST_TR	0.00	724.00
tblVehicleTrips	SU_TR	16.74	74.14
tblVehicleTrips	SU_TR	1.05	0.22
tblVehicleTrips	SU_TR	25.49	13.84
tblVehicleTrips	SU_TR	0.00	59.48
tblVehicleTrips	SU_TR	0.00	724.00
tblVehicleTrips	WD_TR	1.89	12.29
tblVehicleTrips	WD_TR	11.03	1.02
tblVehicleTrips	WD_TR	56.24	43.80
tblVehicleTrips	WD_TR	0.00	64.83
tblVehicleTrips	WD_TR	0.00	396.00
tblWater	IndoorWaterUseRate	9,597,622.39	9,500,000.00
tblWater	IndoorWaterUseRate	782,222.71	500,000.00
tblWater	OutdoorWaterUseRate	69,105,918.28	11,516,480.00
tblWater	OutdoorWaterUseRate	0.00	1,084,050.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	17.9300	239.4738	122.7354	0.4263	33.6767	8.0178	41.6945	15.4993	7.4159	22.9152	0.0000	44,434.4771	44,434.4771	6.7330	0.0000	44,602.8006
2020	30.7976	56.1323	53.2107	0.0943	1.2636	2.8629	4.1264	0.3356	2.6638	2.9994	0.0000	9,149.1979	9,149.1979	2.2306	0.0000	9,204.9636
Maximum	**30.7976**	**239.4738**	**122.7354**	**0.4263**	**33.6767**	**8.0178**	**41.6945**	**15.4993**	**7.4159**	**22.9152**	**0.0000**	**44,434.4771**	**44,434.4771**	**6.7330**	**0.0000**	**44,602.8006**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.2346	111.8064	122.7492	0.4263	17.6890	0.6329	18.3220	7.2826	0.6161	7.8987	0.0000	44,434.4770	44,434.4770	6.7330	0.0000	44,602.8006
2020	29.0938	13.1759	53.9778	0.0943	1.2636	0.1397	1.4032	0.3356	0.1386	0.4742	0.0000	9,149.1979	9,149.1979	2.2306	0.0000	9,204.9636
Maximum	**29.0938**	**111.8064**	**122.7492**	**0.4263**	**17.6890**	**0.6329**	**18.3220**	**7.2826**	**0.6161**	**7.8987**	**0.0000**	**44,434.4770**	**44,434.4770**	**6.7330**	**0.0000**	**44,602.8006**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**27.50**	**57.72**	**-0.44**	**0.00**	**45.76**	**92.90**	**56.95**	**51.89**	**92.51**	**67.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Energy	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829
Mobile	13.7755	73.5821	175.7474	0.6354	53.3145	0.5272	53.8417	14.2653	0.4924	14.7576		64,667.9802	64,667.9802	3.2899		64,750.2276
Total	**16.4813**	**73.8559**	**176.1158**	**0.6370**	**53.3145**	**0.5484**	**53.8629**	**14.2653**	**0.5136**	**14.7789**		**64,995.3173**	**64,995.3173**	**3.2970**	**6.0000e-003**	**65,079.5279**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Energy	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829
Mobile	13.7755	73.5821	175.7474	0.6354	53.3145	0.5272	53.8417	14.2653	0.4924	14.7576		64,667.9802	64,667.9802	3.2899		64,750.2276
Total	**16.4813**	**73.8559**	**176.1158**	**0.6370**	**53.3145**	**0.5484**	**53.8629**	**14.2653**	**0.5136**	**14.7789**		**64,995.3173**	**64,995.3173**	**3.2970**	**6.0000e-003**	**65,079.5279**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demo/Site prep/C&G	Site Preparation	8/1/2019	11/1/2019	5	67	
2	Trenching	Trenching	8/1/2019	11/1/2019	5	67	
3	Grading	Grading	9/1/2019	11/29/2019	5	65	

4	Building Construction	Building Construction	10/1/2019	4/1/2020	5	132	
5	Sport Surfaces and Paving	Paving	11/1/2019	6/2/2020	5	153	
6	Pile Driving	Grading	12/1/2019	1/31/2020	5	45	
7	Dynamic Compaction	Grading	12/1/2019	1/31/2020	5	45	
8	Architectural Coating	Architectural Coating	5/1/2020	7/1/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 130

Acres of Paving: 40.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,500; Non-Residential Outdoor: 39,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demo/Site prep/C&G	Rubber Tired Dozers	2	8.00	247	0.40
Demo/Site prep/C&G	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Sport Surfaces and Paving	Pavers	2	8.00	130	0.42

Sport Surfaces and Paving	Paving Equipment	2	8.00	132	0.36
Sport Surfaces and Paving	Rollers	2	8.00	80	0.38
Sport Surfaces and Paving	Sweepers/Scrubbers	2	8.00	64	0.46
Pile Driving	Cranes	1	8.00	429	0.29
Pile Driving	Excavators	0	0.00	158	0.38
Pile Driving	Graders	0	0.00	187	0.41
Pile Driving	Rubber Tired Dozers	0	0.00	247	0.40
Pile Driving	Scrapers	0	0.00	367	0.48
Pile Driving	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Pile Driving	Welders	1	8.00	46	0.45
Dynamic Compaction	Cranes	1	8.00	430	0.29
Dynamic Compaction	Excavators	0	0.00	158	0.38
Dynamic Compaction	Graders	0	0.00	187	0.41
Dynamic Compaction	Rubber Tired Dozers	0	0.00	247	0.40
Dynamic Compaction	Scrapers	0	0.00	367	0.48
Dynamic Compaction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demo/Site prep/C&G	5	20.00	0.00	10,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	20.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	10,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	50.00	6.00	621.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sport Surfaces and Paving	8	30.00	0.00	460.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pile Driving	2	6.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Dynamic Compaction	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	2.00	44.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demo/Site prep/C&G - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9676	31.1609	15.4762	0.0264		1.6456	1.6456		1.5139	1.5139		2,613.4826	2,613.4826	0.8269		2,634.1545
Total	**2.9676**	**31.1609**	**15.4762**	**0.0264**	**12.0442**	**1.6456**	**13.6898**	**6.6205**	**1.5139**	**8.1344**		**2,613.4826**	**2,613.4826**	**0.8269**		**2,634.1545**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3256	46.2379	9.4480	0.1207	2.7386	0.1725	2.9110	0.7505	0.1650	0.9155		13,030.1860	13,030.1860	0.9463		13,053.8438
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**1.4323**	**46.3126**	**10.2588**	**0.1229**	**2.9621**	**0.1742**	**3.1363**	**0.8098**	**0.1666**	**0.9764**		**13,251.1172**	**13,251.1172**	**0.9532**		**13,274.9475**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.6972	0.0000	4.6972	2.5820	0.0000	2.5820			0.0000			0.0000
Off-Road	0.3230	1.3999	14.6934	0.0264		0.0431	0.0431		0.0431	0.0431	0.0000	2,613.4825	2,613.4825	0.8269		2,634.1545
Total	**0.3230**	**1.3999**	**14.6934**	**0.0264**	**4.6972**	**0.0431**	**4.7403**	**2.5820**	**0.0431**	**2.6251**	**0.0000**	**2,613.4825**	**2,613.4825**	**0.8269**		**2,634.1545**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3256	46.2379	9.4480	0.1207	2.7386	0.1725	2.9110	0.7505	0.1650	0.9155		13,030.1860	13,030.1860	0.9463		13,053.8438
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**1.4323**	**46.3126**	**10.2588**	**0.1229**	**2.9621**	**0.1742**	**3.1363**	**0.8098**	**0.1666**	**0.9764**		**13,251.1172**	**13,251.1172**	**0.9532**		**13,274.9475**

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Off-Road	1.8557	17.8731	16.4100	0.0233		1.1631	1.1631		1.0700	1.0700		2,305.0420	2,305.0420	0.7293		2,323.2743
Total	**1.8557**	**17.8731**	**16.4100**	**0.0233**		**1.1631**	**1.1631**		**1.0700**	**1.0700**		**2,305.0420**	**2,305.0420**	**0.7293**		**2,323.2743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0167	0.5813	0.1188	1.5200e-003	0.0344	2.1700e-003	0.0366	9.4300e-003	2.0700e-003	0.0115		163.8081	163.8081	0.0119		164.1055
Vendor	0.0161	0.4580	0.1232	1.0100e-003	0.0256	3.0800e-003	0.0287	7.3700e-003	2.9500e-003	0.0103		107.3265	107.3265	7.8600e-003		107.5229
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**0.1394**	**1.1140**	**1.0528**	**4.7500e-003**	**0.2836**	**6.9900e-003**	**0.2906**	**0.0761**	**6.6200e-003**	**0.0827**		**492.0657**	**492.0657**	**0.0267**		**492.7321**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2856	1.2375	17.6102	0.0233		0.0381	0.0381		0.0381	0.0381	0.0000	2,305.0420	2,305.0420	0.7293		2,323.2743
Total	**0.2856**	**1.2375**	**17.6102**	**0.0233**		**0.0381**	**0.0381**		**0.0381**	**0.0381**	**0.0000**	**2,305.0420**	**2,305.0420**	**0.7293**		**2,323.2743**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0167	0.5813	0.1188	1.5200e-003	0.0344	2.1700e-003	0.0366	9.4300e-003	2.0700e-003	0.0115		163.8081	163.8081	0.0119		164.1055
Vendor	0.0161	0.4580	0.1232	1.0100e-003	0.0256	3.0800e-003	0.0287	7.3700e-003	2.9500e-003	0.0103		107.3265	107.3265	7.8600e-003		107.5229
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	**0.1394**	**1.1140**	**1.0528**	**4.7500e-003**	**0.2836**	**6.9900e-003**	**0.2906**	**0.0761**	**6.6200e-003**	**0.0827**		**492.0657**	**492.0657**	**0.0267**		**492.7321**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					14.1652	0.0000	14.1652	6.8495	0.0000	6.8495			0.0000			0.0000
Off-Road	4.8653	54.6513	29.2964	0.0536		2.5015	2.5015		2.3014	2.3014		5,305.5697	5,305.5697	1.6786		5,347.5353
Total	**4.8653**	**54.6513**	**29.2964**	**0.0536**	**14.1652**	**2.5015**	**16.6667**	**6.8495**	**2.3014**	**9.1509**		**5,305.5697**	**5,305.5697**	**1.6786**		**5,347.5353**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3664	47.6606	9.7387	0.1244	2.8228	0.1778	3.0006	0.7736	0.1701	0.9437		13,431.1148	13,431.1148	0.9754		13,455.5005
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**1.4464**	**47.7166**	**10.3468**	**0.1261**	**2.9905**	**0.1791**	**3.1696**	**0.8181**	**0.1713**	**0.9894**		**13,596.8132**	**13,596.8132**	**0.9806**		**13,621.3283**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5244	0.0000	5.5244	2.6713	0.0000	2.6713			0.0000			0.0000
Off-Road	0.6579	2.8509	26.0218	0.0536		0.0877	0.0877		0.0877	0.0877	0.0000	5,305.5697	5,305.5697	1.6786		5,347.5353
Total	**0.6579**	**2.8509**	**26.0218**	**0.0536**	**5.5244**	**0.0877**	**5.6121**	**2.6713**	**0.0877**	**2.7590**	**0.0000**	**5,305.5697**	**5,305.5697**	**1.6786**		**5,347.5353**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	1.3664	47.6606	9.7387	0.1244	2.8228	0.1778	3.0006	0.7736	0.1701	0.9437		13,431.1148	13,431.1148	0.9754		13,455.5005
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	**1.4464**	**47.7166**	**10.3468**	**0.1261**	**2.9905**	**0.1791**	**3.1696**	**0.8181**	**0.1713**	**0.9894**		**13,596.8132**	**13,596.8132**	**0.9806**		**13,621.3283**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0016	17.1844	17.3429	0.0252		1.1005	1.1005		1.0385	1.0385		2,424.2381	2,424.2381	0.5784		2,438.6979
Total	**2.0016**	**17.1844**	**17.3429**	**0.0252**		**1.1005**	**1.1005**		**1.0385**	**1.0385**		**2,424.2381**	**2,424.2381**	**0.5784**		**2,438.6979**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0398	1.3880	0.2836	3.6200e-003	0.1444	5.1800e-003	0.1496	0.0378	4.9500e-003	0.0428		391.1594	391.1594	0.0284		391.8696
Vendor	0.0242	0.6870	0.1848	1.5100e-003	0.0384	4.6200e-003	0.0430	0.0111	4.4200e-003	0.0155		160.9898	160.9898	0.0118		161.2844
Worker	0.2666	0.1866	2.0269	5.5500e-003	0.5589	4.3500e-003	0.5632	0.1482	4.0100e-003	0.1522		552.3279	552.3279	0.0173		552.7593
Total	**0.3306**	**2.2617**	**2.4954**	**0.0107**	**0.7417**	**0.0142**	**0.7558**	**0.1971**	**0.0134**	**0.2105**		**1,104.4771**	**1,104.4771**	**0.0575**		**1,105.9133**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3485	3.8535	17.7348	0.0252		0.0380	0.0380		0.0380	0.0380	0.0000	2,424.2381	2,424.2381	0.5784		2,438.6978
Total	**0.3485**	**3.8535**	**17.7348**	**0.0252**		**0.0380**	**0.0380**		**0.0380**	**0.0380**	**0.0000**	**2,424.2381**	**2,424.2381**	**0.5784**		**2,438.6978**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0398	1.3880	0.2836	3.6200e-003	0.1444	5.1800e-003	0.1496	0.0378	4.9500e-003	0.0428		391.1594	391.1594	0.0284		391.8696
Vendor	0.0242	0.6870	0.1848	1.5100e-003	0.0384	4.6200e-003	0.0430	0.0111	4.4200e-003	0.0155		160.9898	160.9898	0.0118		161.2844
Worker	0.2666	0.1866	2.0269	5.5500e-003	0.5589	4.3500e-003	0.5632	0.1482	4.0100e-003	0.1522		552.3279	552.3279	0.0173		552.7593
Total	**0.3306**	**2.2617**	**2.4954**	**0.0107**	**0.7417**	**0.0142**	**0.7558**	**0.1971**	**0.0134**	**0.2105**		**1,104.4771**	**1,104.4771**	**0.0575**		**1,105.9133**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8023	15.7557	17.1861	0.0252		0.9512	0.9512		0.8978	0.8978		2,389.3618	2,389.3618	0.5699		2,403.6096
Total	**1.8023**	**15.7557**	**17.1861**	**0.0252**		**0.9512**	**0.9512**		**0.8978**	**0.8978**		**2,389.3618**	**2,389.3618**	**0.5699**		**2,403.6096**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0368	1.2967	0.2742	3.5800e-003	0.1444	4.1900e-003	0.1486	0.0378	4.0100e-003	0.0418		387.1361	387.1361	0.0276		387.8265
Vendor	0.0206	0.6290	0.1672	1.5000e-003	0.0384	3.1700e-003	0.0416	0.0111	3.0300e-003	0.0141		159.9077	159.9077	0.0111		160.1853
Worker	0.2467	0.1665	1.8404	5.3700e-003	0.5589	4.2400e-003	0.5631	0.1482	3.9000e-003	0.1521		535.1825	535.1825	0.0154		535.5662
Total	**0.3041**	**2.0922**	**2.2818**	**0.0105**	**0.7417**	**0.0116**	**0.7533**	**0.1971**	**0.0109**	**0.2080**		**1,082.2263**	**1,082.2263**	**0.0541**		**1,083.5780**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3485	3.8535	17.7348	0.0252		0.0380	0.0380		0.0380	0.0380	0.0000	2,389.3618	2,389.3618	0.5699		2,403.6096

Total	**0.3485**	**3.8535**	**17.7348**	**0.0252**		**0.0380**	**0.0380**		**0.0380**	**0.0380**	**0.0000**	**2,389.3618**	**2,389.3618**	**0.5699**		**2,403.6096**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0368	1.2967	0.2742	3.5800e-003	0.1444	4.1900e-003	0.1486	0.0378	4.0100e-003	0.0418		387.1361	387.1361	0.0276		387.8265
Vendor	0.0206	0.6290	0.1672	1.5000e-003	0.0384	3.1700e-003	0.0416	0.0111	3.0300e-003	0.0141		159.9077	159.9077	0.0111		160.1853
Worker	0.2467	0.1665	1.8404	5.3700e-003	0.5589	4.2400e-003	0.5631	0.1482	3.9000e-003	0.1521		535.1825	535.1825	0.0154		535.5662
Total	**0.3041**	**2.0922**	**2.2818**	**0.0105**	**0.7417**	**0.0116**	**0.7533**	**0.1971**	**0.0109**	**0.2080**		**1,082.2263**	**1,082.2263**	**0.0541**		**1,083.5780**

3.6 Sport Surfaces and Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0252	20.2002	18.6588	0.0279		1.2267	1.2267		1.1286	1.1286		2,760.2965	2,760.2965	0.8733		2,782.1297
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7057**	**20.2002**	**18.6588**	**0.0279**		**1.2267**	**1.2267**		**1.1286**	**1.1286**		**2,760.2965**	**2,760.2965**	**0.8733**		**2,782.1297**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0254	0.8871	0.1813	2.3200e-003	0.1542	3.3100e-003	0.1575	0.0394	3.1700e-003	0.0425		249.9784	249.9784	0.0182		250.4323
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1600	0.1120	1.2162	3.3300e-003	0.3353	2.6100e-003	0.3379	0.0889	2.4000e-003	0.0913		331.3967	331.3967	0.0104		331.6556
Total	**0.1854**	**0.9990**	**1.3974**	**5.6500e-003**	**0.4896**	**5.9200e-003**	**0.4955**	**0.1283**	**5.5700e-003**	**0.1339**		**581.3751**	**581.3751**	**0.0285**		**582.0879**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4051	4.0608	21.1380	0.0279		0.0457	0.0457		0.0457	0.0457	0.0000	2,760.2965	2,760.2965	0.8733		2,782.1297
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0856**	**4.0608**	**21.1380**	**0.0279**		**0.0457**	**0.0457**		**0.0457**	**0.0457**	**0.0000**	**2,760.2965**	**2,760.2965**	**0.8733**		**2,782.1297**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0254	0.8871	0.1813	2.3200e-003	0.1542	3.3100e-003	0.1575	0.0394	3.1700e-003	0.0425		249.9784	249.9784	0.0182		250.4323
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1600	0.1120	1.2162	3.3300e-003	0.3353	2.6100e-003	0.3379	0.0889	2.4000e-003	0.0913		331.3967	331.3967	0.0104		331.6556
Total	**0.1854**	**0.9990**	**1.3974**	**5.6500e-003**	**0.4896**	**5.9200e-003**	**0.4955**	**0.1283**	**5.5700e-003**	**0.1339**		**581.3751**	**581.3751**	**0.0285**		**582.0879**

3.6 Sport Surfaces and Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8965	18.7201	18.6268	0.0279		1.1267	1.1267		1.0366	1.0366		2,700.0863	2,700.0863	0.8733		2,721.9178
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5770**	**18.7201**	**18.6268**	**0.0279**		**1.1267**	**1.1267**		**1.0366**	**1.0366**		**2,700.0863**	**2,700.0863**	**0.8733**		**2,721.9178**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0235	0.8287	0.1753	2.2900e-003	0.0681	2.6800e-003	0.0708	0.0182	2.5600e-003	0.0208		247.4073	247.4073	0.0177		247.8485
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.1715**	**0.9286**	**1.2795**	**5.5100e-003**	**0.4034**	**5.2200e-003**	**0.4086**	**0.1071**	**4.9000e-003**	**0.1120**		**568.5167**	**568.5167**	**0.0269**		**569.1882**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4051	4.0608	21.1380	0.0279		0.0457	0.0457		0.0457	0.0457	0.0000	2,700.0862	2,700.0862	0.8733		2,721.9178
Paving	0.6805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0856**	**4.0608**	**21.1380**	**0.0279**		**0.0457**	**0.0457**		**0.0457**	**0.0457**	**0.0000**	**2,700.0862**	**2,700.0862**	**0.8733**		**2,721.9178**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0235	0.8287	0.1753	2.2900e-003	0.0681	2.6800e-003	0.0708	0.0182	2.5600e-003	0.0208		247.4073	247.4073	0.0177		247.8485
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.1715**	**0.9286**	**1.2795**	**5.5100e-003**	**0.4034**	**5.2200e-003**	**0.4086**	**0.1071**	**4.9000e-003**	**0.1120**		**568.5167**	**568.5167**	**0.0269**		**569.1882**

3.7 Pile Driving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.1511	11.0518	8.3216	0.0133		0.4794	0.4794		0.4490	0.4490		1,267.5965	1,267.5965	0.3701		1,276.8488
Total	**1.1511**	**11.0518**	**8.3216**	**0.0133**	**0.0000**	**0.4794**	**0.4794**	**0.0000**	**0.4490**	**0.4490**		**1,267.5965**	**1,267.5965**	**0.3701**		**1,276.8488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8800e-003	0.0656	0.0134	1.7000e-004	6.9500e-003	2.4000e-004	7.2000e-003	1.8200e-003	2.3000e-004	2.0500e-003		18.4767	18.4767	1.3400e-003		18.5102
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0320	0.0224	0.2432	6.7000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.8000e-004	0.0183		66.2793	66.2793	2.0700e-003		66.3311
Total	**0.0339**	**0.0880**	**0.2566**	**8.4000e-004**	**0.0740**	**7.6000e-004**	**0.0748**	**0.0196**	**7.1000e-004**	**0.0203**		**84.7560**	**84.7560**	**3.4100e-003**		**84.8413**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.1755	1.5745	6.3241	0.0133		0.0205	0.0205		0.0205	0.0205	0.0000	1,267.5965	1,267.5965	0.3701		1,276.8488
Total	**0.1755**	**1.5745**	**6.3241**	**0.0133**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**1,267.5965**	**1,267.5965**	**0.3701**		**1,276.8488**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8800e-003	0.0656	0.0134	1.7000e-004	6.9500e-003	2.4000e-004	7.2000e-003	1.8200e-003	2.3000e-004	2.0500e-003		18.4767	18.4767	1.3400e-003		18.5102
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0320	0.0224	0.2432	6.7000e-004	0.0671	5.2000e-004	0.0676	0.0178	4.8000e-004	0.0183		66.2793	66.2793	2.0700e-003		66.3311
Total	**0.0339**	**0.0880**	**0.2566**	**8.4000e-004**	**0.0740**	**7.6000e-004**	**0.0748**	**0.0196**	**7.1000e-004**	**0.0203**		**84.7560**	**84.7560**	**3.4100e-003**		**84.8413**

3.7 Pile Driving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.0456	10.0463	7.6044	0.0133		0.4266	0.4266		0.3994	0.3994		1,244.3722	1,244.3722	0.3660		1,253.5227
Total	**1.0456**	**10.0463**	**7.6044**	**0.0133**	**0.0000**	**0.4266**	**0.4266**	**0.0000**	**0.3994**	**0.3994**		**1,244.3722**	**1,244.3722**	**0.3660**		**1,253.5227**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7400e-003	0.0613	0.0130	1.7000e-004	6.6900e-003	2.0000e-004	6.8900e-003	1.7500e-003	1.9000e-004	1.9400e-003		18.2866	18.2866	1.3000e-003		18.3192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0296	0.0200	0.2209	6.4000e-004	0.0671	5.1000e-004	0.0676	0.0178	4.7000e-004	0.0183		64.2219	64.2219	1.8400e-003		64.2679
Total	**0.0314**	**0.0812**	**0.2338**	**8.1000e-004**	**0.0738**	**7.1000e-004**	**0.0745**	**0.0195**	**6.6000e-004**	**0.0202**		**82.5085**	**82.5085**	**3.1400e-003**		**82.5872**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1755	1.5745	6.3241	0.0133		0.0205	0.0205		0.0205	0.0205	0.0000	1,244.3722	1,244.3722	0.3660		1,253.5227
Total	**0.1755**	**1.5745**	**6.3241**	**0.0133**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**1,244.3722**	**1,244.3722**	**0.3660**		**1,253.5227**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	1.7400e-003	0.0613	0.0130	1.7000e-004	6.6900e-003	2.0000e-004	6.8900e-003	1.7500e-003	1.9000e-004	1.9400e-003		18.2866	18.2866	1.3000e-003		18.3192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0296	0.0200	0.2209	6.4000e-004	0.0671	5.1000e-004	0.0676	0.0178	4.7000e-004	0.0183		64.2219	64.2219	1.8400e-003		64.2679
Total	**0.0314**	**0.0812**	**0.2338**	**8.1000e-004**	**0.0738**	**7.1000e-004**	**0.0745**	**0.0195**	**6.6000e-004**	**0.0202**		**82.5085**	**82.5085**	**3.1400e-003**		**82.5872**

3.8 Dynamic Compaction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7677	9.4495	6.5297	0.0107		0.3806	0.3806		0.3501	0.3501		1,062.5899	1,062.5899	0.3362		1,070.9947
Total	**0.7677**	**9.4495**	**6.5297**	**0.0107**	**0.0000**	**0.3806**	**0.3806**	**0.0000**	**0.3501**	**0.3501**		**1,062.5899**	**1,062.5899**	**0.3362**		**1,070.9947**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0213	0.0149	0.1622	4.4000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		44.1862	44.1862	1.3800e-003		44.2207
Total	**0.0213**	**0.0149**	**0.1622**	**4.4000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**44.1862**	**44.1862**	**1.3800e-003**		**44.2207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1320	0.5718	4.8385	0.0107		0.0176	0.0176		0.0176	0.0176	0.0000	1,062.5899	1,062.5899	0.3362		1,070.9947
Total	**0.1320**	**0.5718**	**4.8385**	**0.0107**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**1,062.5899**	**1,062.5899**	**0.3362**		**1,070.9947**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0213	0.0149	0.1622	4.4000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		44.1862	44.1862	1.3800e-003		44.2207
Total	**0.0213**	**0.0149**	**0.1622**	**4.4000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**44.1862**	**44.1862**	**1.3800e-003**		**44.2207**

3.8 Dynamic Compaction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.7051	8.4948	5.8510	0.0107		0.3405	0.3405		0.3133	0.3133		1,039.3115	1,039.3115	0.3361		1,047.7148
Total	**0.7051**	**8.4948**	**5.8510**	**0.0107**	**0.0000**	**0.3405**	**0.3405**	**0.0000**	**0.3133**	**0.3133**		**1,039.3115**	**1,039.3115**	**0.3361**		**1,047.7148**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0197	0.0133	0.1472	4.3000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		42.8146	42.8146	1.2300e-003		42.8453
Total	**0.0197**	**0.0133**	**0.1472**	**4.3000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**42.8146**	**42.8146**	**1.2300e-003**		**42.8453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.1320	0.5718	4.8385	0.0107		0.0176	0.0176		0.0176	0.0176	0.0000	1,039.3115	1,039.3115	0.3361		1,047.7148
Total	**0.1320**	**0.5718**	**4.8385**	**0.0107**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**0.0176**	**0.0176**	**0.0000**	**1,039.3115**	**1,039.3115**	**0.3361**		**1,047.7148**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0197	0.0133	0.1472	4.3000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.1000e-004	0.0122		42.8146	42.8146	1.2300e-003		42.8453
Total	**0.0197**	**0.0133**	**0.1472**	**4.3000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.1000e-004**	**0.0122**		**42.8146**	**42.8146**	**1.2300e-003**		**42.8453**

3.9 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.6442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**27.8864**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.8100e-003	0.2756	0.0583	7.6000e-004	0.0175	8.9000e-004	0.0184	4.7900e-003	8.5000e-004	5.6400e-003		82.2898	82.2898	5.8700e-003		82.4366
Vendor	6.8800e-003	0.2097	0.0557	5.0000e-004	0.0128	1.0600e-003	0.0139	3.6900e-003	1.0100e-003	4.6900e-003		53.3026	53.3026	3.7000e-003		53.3951
Worker	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.1627**	**0.5852**	**1.2183**	**4.4800e-003**	**0.3656**	**4.4900e-003**	**0.3701**	**0.0974**	**4.2000e-003**	**0.1016**		**456.7019**	**456.7019**	**0.0188**		**457.1714**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.6442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**27.6739**	**0.1288**	**1.8324**	**2.9700e-003**		**3.9600e-003**	**3.9600e-003**		**3.9600e-003**	**3.9600e-003**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	7.8100e-003	0.2756	0.0583	7.6000e-004	0.0175	8.9000e-004	0.0184	4.7900e-003	8.5000e-004	5.6400e-003		82.2898	82.2898	5.8700e-003		82.4366
Vendor	6.8800e-003	0.2097	0.0557	5.0000e-004	0.0128	1.0600e-003	0.0139	3.6900e-003	1.0100e-003	4.6900e-003		53.3026	53.3026	3.7000e-003		53.3951
Worker	0.1480	0.0999	1.1043	3.2200e-003	0.3353	2.5400e-003	0.3379	0.0889	2.3400e-003	0.0913		321.1095	321.1095	9.2100e-003		321.3397
Total	**0.1627**	**0.5852**	**1.2183**	**4.4800e-003**	**0.3656**	**4.4900e-003**	**0.3701**	**0.0974**	**4.2000e-003**	**0.1016**		**456.7019**	**456.7019**	**0.0188**		**457.1714**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.7755	73.5821	175.7474	0.6354	53.3145	0.5272	53.8417	14.2653	0.4924	14.7576		64,667.9802	64,667.9802	3.2899		64,750.2276
Unmitigated	13.7755	73.5821	175.7474	0.6354	53.3145	0.5272	53.8417	14.2653	0.4924	14.7576		64,667.9802	64,667.9802	3.2899		64,750.2276

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	713.00	4,300.00	4300.00	5,000,757	5,000,757
General Office Building	23.43	5.11	5.11	58,607	58,607
General Office Building	10.19	2.22	2.22	25,481	25,481
General Office Building	3.06	0.67	0.67	7,644	7,644
General Office Building	13.24	2.89	2.89	33,126	33,126
General Office Building	5.09	1.11	1.11	12,741	12,741
Library	1,095.00	346.00	346.00	2,224,248	2,224,248
Other Asphalt Surfaces	1,880.00	1,725.00	1725.00	6,879,471	6,879,471

Other Non-Asphalt Surfaces	396.00	724.00	724.00	1,835,236	1,835,236
Parking Lot	0.00	0.00	0.00		
Total	4,139.00	7,107.00	7,107.00	16,077,311	16,077,311

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Other Asphalt Surfaces	16.60	8.40	6.90	52.00	43.00	5.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	52.00	43.00	5.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Library	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Other Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Other Non-Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Parking Lot	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829
NaturalGas Unmitigated	0.0300	0.2725	0.2289	1.6400e-003		0.0207	0.0207		0.0207	0.0207		327.0395	327.0395	6.2700e-003	6.0000e-003	328.9829

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	142.603	1.5400e-003	0.0140	0.0117	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003		16.7768	16.7768	3.2000e-004	3.1000e-004	16.8765
General Office Building	285.205	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003		33.5536	33.5536	6.4000e-004	6.2000e-004	33.7530
General Office Building	370.767	4.0000e-003	0.0364	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003		43.6197	43.6197	8.4000e-004	8.0000e-004	43.8789
General Office Building	655.973	7.0700e-003	0.0643	0.0540	3.9000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003		77.1733	77.1733	1.4800e-003	1.4100e-003	77.6319
General Office Building	85.5616	9.2000e-004	8.3900e-003	7.0500e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004		10.0661	10.0661	1.9000e-004	1.8000e-004	10.1259
Library	1239.73	0.0134	0.1215	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003		145.8501	145.8501	2.8000e-003	2.6700e-003	146.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Total		**0.0300**	**0.2725**	**0.2289**	**1.6400e-003**		**0.0207**	**0.0207**		**0.0207**	**0.0207**		**327.0395**	**327.0395**	**6.2700e-003**	**5.9900e-003**	**328.9829**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.142603	1.5400e-003	0.0140	0.0117	8.0000e-005		1.0600e-003	1.0600e-003		1.0600e-003	1.0600e-003		16.7768	16.7768	3.2000e-004	3.1000e-004	16.8765
General Office Building	0.285205	3.0800e-003	0.0280	0.0235	1.7000e-004		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003		33.5536	33.5536	6.4000e-004	6.2000e-004	33.7530
General Office Building	0.370767	4.0000e-003	0.0364	0.0305	2.2000e-004		2.7600e-003	2.7600e-003		2.7600e-003	2.7600e-003		43.6197	43.6197	8.4000e-004	8.0000e-004	43.8789
General Office Building	0.655973	7.0700e-003	0.0643	0.0540	3.9000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003		77.1733	77.1733	1.4800e-003	1.4100e-003	77.6319
General Office Building	0.0855616	9.2000e-004	8.3900e-003	7.0500e-003	5.0000e-005		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004		10.0661	10.0661	1.9000e-004	1.8000e-004	10.1259
Library	1.23973	0.0134	0.1215	0.1021	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003		145.8501	145.8501	2.8000e-003	2.6700e-003	146.7168
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0300**	**0.2725**	**0.2289**	**1.6400e-003**		**0.0207**	**0.0207**		**0.0207**	**0.0207**		**327.0395**	**327.0395**	**6.2700e-003**	**5.9900e-003**	**328.9829**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Unmitigated	2.6758	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0130	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Total	**2.6758**	**1.2800e-003**	**0.1394**	**1.0000e-005**		**5.0000e-004**	**5.0000e-004**		**5.0000e-004**	**5.0000e-004**		**0.2976**	**0.2976**	**7.9000e-004**		**0.3174**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

SubCategory	lb/day										lb/day					
Architectural Coating	0.3366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0130	1.2800e-003	0.1394	1.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004		0.2976	0.2976	7.9000e-004		0.3174
Total	**2.6758**	**1.2800e-003**	**0.1394**	**1.0000e-005**		**5.0000e-004**	**5.0000e-004**		**5.0000e-004**	**5.0000e-004**		**0.2976**	**0.2976**	**7.9000e-004**		**0.3174**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CO HOTSPOT ANALYSIS USING CITY OF CARSON TRAFFIC STANDARDS

CO Hotspot Analysis City Traffic Methodology

As explained in Section 4.2.4, to verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted based on the Traffic Impact Assessment (TIA) (Gibson 2018) results and the Caltrans Institute of Transportation Studies *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol; Caltrans 1997)

The proposed project's TIA evaluated 31 intersections. As determined by the TIA, the following intersections under the Cumulative Year (2020) operate at Level of Service (LOS) E or worse during the AM or PM peak hours:

- Main St/MLK Jr. St (LOS E in PM)
- Main Street/Del Amo Blvd (LOS F in PM)
- Avalon Blvd/Albetoni St (LOS E in PM)
- Avalon Blvd/Del Amo Blvd (LOSE in AM and F in PM)
- Main St/Albertoni St (LOS E in PM)
- Main St/Victoria St (LOS E in PM)
- Hamilton Ave/Del Amo Blvd (LOS F in AM and PM)
- Hamilton Ave/i-110 SB ramps (LOS F in AM and PM)
- Figueroa St/Del Amo Blvd (LOS F in PM)

According to the CO Protocol, there is a cap on the number of intersections that need to be analyzed for any one project. For a single project with multiple intersections, only the three intersections representing the worst LOS ratings of the project, and, to the extent they are different intersections, the three intersections representing the highest traffic volumes, need be analyzed. For each intersection failing a screening test as described in this protocol, an additional intersection should be analyzed (Caltrans 2010). Based on the CO hotspot screening evaluation the intersections that exceeded the CO hotspot screening criteria shown above all have similar geometries and are signalized. Therefore, the five intersections with an LOS of F and one intersection at LOS E that had a high traffic volume exceeded the CO hotspot screening criteria were evaluated. The potential impact of the project on local CO levels was assessed at this intersection with the Caltrans CL4 interface based on the California LINE Source Dispersion Model (CALINE4), which allows microscale CO concentrations to be estimated along each roadway corridor or near intersections (Caltrans 1998a).

The emissions factor represents the weighted average emissions rate of the local SCAB vehicle fleet expressed in grams per mile per vehicle. Consistent with the TIA, emissions factors for 2020 were used for the analysis. Emissions factors for 2020 were predicted by EMFAC 2014 based on a 5-mile-per-hour average speed for all of the intersections for approach and departure segments. The hourly traffic volume anticipated to travel on each link, in units of vehicles per hour, was based on the traffic report. Modeling assumptions are outlined in Appendix C.

Four receptor locations at each intersection were modeled to determine CO ambient concentrations. A receptor was assumed on the sidewalk at each corner of the modeled intersections, for a total of four receptors adjacent to the intersection, to represent the future possibility of extended outdoor exposure. CO concentrations were modeled at these locations to assess the maximum potential CO exposure that could occur in 2020, which is more conservative than an operational year of 2021. A receptor height of 5.9 feet (1.8 meters) was used in accordance with Caltrans recommendations for all receptor locations (Caltrans 1998b).

The maximum CO concentration measured at the Compton monitoring station over the last 3 years was 6.1 parts per million, which was measured in 2017. The 1-hour average CO concentration was added the ambient concentration to compare to the CAAQS. The 8-hour average CO concentration was added to the SCAQMD 8-hour CO ambient concentration of 4.6 parts per million for 2020 from the Compton monitoring station to compare to the CAAQS. The CALINE4 predicted CO concentrations are shown in Table C-2. Model output data is provided in Appendix C.

Table C-2
CALINE4 Predicted Carbon Monoxide Concentrations

Intersection	Maximum Modeled Carbon Monoxide Impact (ppm)	
	1-hour	*8-hour*
Hamilton Ave/Del Amo Blvd	6.5	4.88
Hamilton Ave/i-110 SB ramps	6.5	4.88
Figueroa St/Del Amo Blvd	6.7	5.02
Avalon Boulevard/Albertoni Street	7.0	5.23
Avalon Boulevard/Del Amo Boulevard	7.0	5.23
Main Street & Victoria	6.7	5.02

Source: Caltrans 1998a (CALINE4).
Notes: ppm = parts per million.

As shown in Table C-2, the maximum CO concentration predicted for the 1-hour averaging period at the studied intersections would be 7.0 ppm, which is below the 1-hour CO CAAQS of 20 ppm (CARB 2016c). The maximum predicted 8-hour CO concentration of 5.23 ppm at the studied intersections would be below the 8-hour CO CAAQS of 9.0 ppm (CARB 2016c). Neither the 1-hour nor 8-hour CAAQS would be equaled or exceeded at any of the intersections studied. Accordingly, the project would not cause or contribute to violations of the CAAQS, and would not result in exposure of sensitive receptors to localized high concentrations of CO. As such, impacts would be less than significant to sensitive receptors with regard to potential CO hotspots resulting from project contribution to cumulative traffic-related air quality impacts, and no mitigation is required.

APPENDIX D-1

Plant Species Compendium

APPENDIX D-1
Plant Species Compendium

PLANTS

EUDICOTS

VASCULAR SPECIES

ADOXACEAE—MUSKROOT FAMILY

Sambucus nigra ssp. *caerulea*—blue elderberry

AMARANTHACEAE—AMARANTH FAMILY

* *Amaranthus albus*—prostrate pigweed*

ANACARDIACEAE—SUMAC OR CASHEW FAMILY

* *Schinus terebinthifolius*—Brazilian peppertree*

APIACEAE—CARROT FAMILY

* *Apium graveolens*—wild celery*

Foeniculum vulgare—fennel*

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—western ragweed

Artemisia californica—California sagebrush

Baccharis pilularis—coyote brush

Baccharis salicifolia—mulefat

* *Carduus pycnocephalus*—Italian plumeless thistle*

* *Centaurea melitensis*—Maltese star-thistle*

* *Cirsium vulgare*—bull thistle*

Encelia californica—California brittle bush

* *Erigeron bonariensis*—asthmaweed*

Erigeron canadensis—Canadian horseweed

* *Glebionis coronaria*—crowndaisy*

* *Helminthotheca echioides*—bristly oxtongue*

Isocoma menziesii var. menziesii—Menzies' goldenbush

* *Lactuca serriola*—prickly lettuce*

Pluchea sericea—arrow weed

Silybum marianum—blessed milkthistle*

* *Sonchus asper*—spiny sowthistle*

* *Sonchus oleraceus*—common sowthistle*

Xanthium strumarium—cocklebur

BIGNONIACEAE—BIGNONIA FAMILY

* *Jacaranda mimosifolia*—blue jacaranda*

BRASSICACEAE—MUSTARD FAMILY

* *Cakile maritima*—European searocket
* *Hirschfeldia incana*—shortpod mustard
* *Raphanus sativus*—cultivated radish

CACTACEAE—CACTUS FAMILY

Opuntia littoralis—coast prickly pear

CARYOPHYLLACEAE—PINK FAMILY

* *Polycarpon tetraphyllum*—fourleaf manyseed

CHENOPODIACEAE—GOOSEFOOT FAMILY

Atriplex lentiformis—quailbush
* *Atriplex semibaccata*—Australian saltbush
* *Bassia hyssopifolia*—fivehorn smotherweed
* *Beta vulgaris*—common beet
* *Chenopodium album*—lambsquarters
* *Chenopodium murale*—nettleleaf goosefoot
Salicornia pacifica—pickleweed
* *Salsola tragus*—prickly Russian thistle

CLEOMACEAE—CLEOME FAMILY

Peritoma arborea—bladderpod spiderflower

CONVOLVULACEAE—MORNING-GLORY FAMILY

* *Convolvulus arvensis*—field bindweed
Cressa truxillensis—alkali weed

EUPHORBIACEAE—SPURGE FAMILY

Croton setiger—dove weed
Euphorbia albomarginata—whitemargin sandmat
* *Euphorbia serpens*—matted sandmat
* *Ricinus communis*—castorbean

FABACEAE—LEGUME FAMILY

* *Acacia longifolia*—Sydney golden wattle
* *Acacia redolens*—bank catclaw
* *Ceratonia siliqua*—St. John's bread
* *Lotus corniculatus*—bird's-foot trefoil

GERANIACEAE—GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

MALVACEAE—MALLOW FAMILY

* *Malva parviflora*—cheeseweed mallow

Malvella leprosa—alkali mallow

MYRSINACEAE—MYRSINE FAMILY

* *Lysimachia arvensis*—scarlet pimpernel

MYRTACEAE—MYRTLE FAMILY

* *Eucalyptus camaldulensis*—river redgum

* *Eucalyptus citriodora*—lemonscented gum

* *Eucalyptus sideroxylon*—red ironbark

OLEACEAE—OLIVE FAMILY

* *Olea europaea*—olive

ONAGRACEAE—EVENING PRIMROSE FAMILY

Oenothera elata—Hooker's evening primrose

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum fasciculatum—California buckwheat

Persicaria lapathifolia—smartweed

* *Polygonum aviculare*—prostrate knotweed

* *Rumex crispus*—curly dock

Rumex fueginus—golden dock

PORTULACACEAE—PURSLANE FAMILY

* *Portulaca oleracea*—little hogweed

SCROPHULARIACEAE—FIGWORT FAMILY

* *Myoporum laetum*—myoporum

SOLANACEAE—NIGHTSHADE FAMILY

* *Nicotiana glauca*—tree tobacco

Solanum americanum—American black nightshade

GYMNOSPERMS AND GNETOPHYTES

VASCULAR SPECIES

PINACEAE—PINE FAMILY

* *Pinus halepensis*—aleppo pine

* *Pinus pinea*—Italian stone pine

MONOCOTS

VASCULAR SPECIES

ARECACEAE—PALM FAMILY

* *Washingtonia robusta*—Washington fan palm

CYPERACEAE—SEDGE FAMILY

* *Cyperus involucratus*—umbrella plant

Schoenoplectus acutus—hardstem bulrush

Schoenoplectus californicus—California bulrush

JUNCACEAE—RUSH FAMILY

Juncus mexicanus—Mexican rush

POACEAE—GRASS FAMILY

* *Agrostis avenacea*—Pacific bentgrass

* *Avena barbata*—slender oat

Avena fatua—wild oat

* *Bromus catharticus*—rescuegrass

* *Bromus diandrus*—ripgut brome

* *Bromus hordeaceus*—soft brome

* *Cynodon dactylon*—Bermudagrass

Distichlis spicata—salt grass

* *Festuca perennis*—perennial rye grass

Hordeum murinum—mouse barley

Leptochloa fusca ssp. uninervia—Mexican sprangletop

* *Pennisetum clandestinum*—kikuyugrass

* *Pennisetum setaceum*—fountain grass

* *Phalaris minor*—littleseed canarygrass

* *Poa annua*—annual bluegrass

* *Polypogon monspeliensis*—annual rabbitsfoot grass

* *Polypogon viridis*—beardless rabbitsfoot grass

APPENDIX D-2

Wildlife Species Compendium

APPENDIX D-2
Wildlife Species Compendium

WILDLIFE

BIRD

BLACKBIRDS, ORIOLES AND ALLIES

ICTERIDAE—BLACKBIRDS

Euphagus cyanocephalus—Brewer's blackbird
Sturnella neglecta—western meadowlark

BUSHTITS

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus—bushtit

CARDINALS, GROSBEAKS AND ALLIES

CARDINALIDAE—CARDINALS AND ALLIES

Piranga ludoviciana—western tanager

FALCONS

FALCONIDAE—CARACARAS AND FALCONS

Falco mexicanus—prairie falcon
Falco sparverius—American kestrel

FINCHES

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Spinus psaltria—lesser goldfinch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans—black phoebe
Tyrannus verticalis—western kingbird
Tyrannus vociferans—Cassin's kingbird

HAWKS

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis—red-tailed hawk
Circus hudsonius—northern harrier

HERONS AND BITTERNS

ARDEIDAE—HERONS, BITTERNS, AND ALLIES

Egretta thula—snowy egret

HUMMINGBIRDS

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird
Selasphorus sasin—Allen's hummingbird

PIGEONS AND DOVES

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—mourning dove

SHOREBIRDS

RECURVIROSTRIDAE—STILTS AND AVOCETS

Himantopus mexicanus—black-necked stilt

CHARADRIIDAE—LAPWINGS AND PLOVERS

Charadrius vociferus—killdeer

SHRIKES

LANIIDAE—SHRIKES

Lanius ludovicianus—loggerhead shrike

STARLINGS AND ALLIES

STURNIDAE—STARLINGS

* *Sturnus vulgaris*—European starling

SWALLOWS

HIRUNDINIDAE—SWALLOWS

Hirundo rustica—barn swallow
Petrochelidon pyrrhonota—cliff swallow
Stelgidopteryx serripennis—northern rough-winged swallow

THRUSHES

TURDIDAE—THRUSHES

Sialia mexicana—western bluebird

WOOD WARBLERS AND ALLIES

PARULIDAE—WOOD-WARBLERS

Setophaga coronata—yellow-rumped warbler

NEW WORLD SPARROWS

PASSERELLIDAE—NEW WORLD SPARROWS

Melospiza melodia—song sparrow

Melozone crissalis—California towhee

MAMMAL

DOMESTIC

CANIDS

CANIDAE—WOLVES AND FOXES

Canis latrans—coyote

HARES AND RABBITS

LEPORIDAE—HARES AND RABBITS

Sylvilagus audubonii—desert cottontail

POCKET GOPHERS

GEOMYIDAE—POCKET GOPHERS

Thomomys bottae—Botta's pocket gopher

SQUIRRELS

SCIURIDAE—SQUIRRELS

Spermophilus (Otospermophilus) beecheyi—California ground squirrel

* *Sciurus niger*—eastern fox squirrel

REPTILE

LIZARDS

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis—western fence lizard

Uta stansburiana—common side-blotched lizard

* signifies introduced (non-native) species

APPENDIX D-3

Jurisdictional Delineation Report

Draft

VICTORIA PARK GOLF COURSE REDEVELOPMENT PROJECT

Jurisdictional Delineation Report

Prepared for
Shopoff Group

February 2018

ESA



Draft

VICTORIA PARK GOLF COURSE REDEVELOPMENT PROJECT

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Victoria Golf Course Redevelopment Project

Jurisdictional Delineation Report

1. Introduction and Purpose

Environmental Science Associates (ESA) conducted a jurisdictional delineation for the Shopoff Group (Applicant) for the Victoria Golf Course Redevelopment Project (project). The project's objective is to redevelop the existing golf course facilities into a multi-sport and multi-use facility on the approximately 170-acre project site. The purpose of this preliminary jurisdictional delineation report is to document all drainage features and wetlands within the project site potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE), the California Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). The existing vegetation communities and land uses of the project site are also described below to support the extent of potentially jurisdictional habitats. Representative photographs of the jurisdictional features within the project site are provided in **Appendix A**.

1.1 Project Location

The project is located within property managed by the County of Los Angeles Parks and Recreation Department, within the City of Carson, California, and generally occurs north of Interstate (I) 405, south of State Route 91, east of I-110, and west of I-710 (**Figure 1**). The project site is located southwest of the intersection of East 192nd Street and Avalon Boulevard, within the Victoria Park Golf Course facility (Figure 1). The project site comprises approximately 178 acres of land that has been developed for a golf course facility since the 1960's and is currently still in operation. The project site is bounded by roads and residential developments to the north and east, the Dominguez Channel to the south and southwest, and the Goodyear Blimp facility to the west. Land uses within the project vicinity include residential areas, commercial and industrial development, parks and recreation facilities, and a university. Onsite land uses are open to the public for the purpose of recreation.

2. Jurisdictional Authority

2.1 Waters of the U.S.

The USACE regulates "discharge of dredged or fill material" into "waters" of the United States, which includes tidal waters, interstate waters, and "all other waters, interstate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce or which are tributaries to waters subject to the ebb and flow of the tide" (33 C.F.R. 328.3(a)), pursuant to provisions of Section 404 of the Clean Water Act (CWA).



SOURCE: ESRI

Victoria Park Golf Course Redevelopment

Figure 1

Project Location Map

ESA

The USACE (Federal Register 1982) and the Environmental Protection Agency (EPA) (Federal Register 1980) jointly define wetlands as: “Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Wetlands have the following general diagnostic environmental characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology (Environmental Laboratory 1987).

The USACE takes jurisdiction within rivers and streams to the "ordinary high water mark (OHWM)", determined by erosion, the deposition of vegetation or debris, and changes in vegetation or soil characteristics. However, if there is no federal nexus to navigable waters, these waters are considered "isolated" and thus not subject to their jurisdiction.

The USACE and the EPA have issued a set of guidance documents detailing the process for determining CWA jurisdiction over waters of the U.S. following the *Rapanos vs. United States* decision, which is summarized in the key points below. The EPA and USACE issued a summary memorandum of the guidance for implementing the Supreme Court’s decision in Rapanos that addresses the jurisdiction over waters of the United States under the CWA. On August 28, 2015 the USACE and EPA issued new rules that clarifies the Rapanos decision and further defines the Waters of the U.S.

Rapanos Key Points Summary

A. The USACE and EPA will assert jurisdiction over the following waters:
   - TNWs.
   - Wetlands adjacent to TNW.
   - Non-navigable tributaries of TNWs that are relatively permanent.
   - Where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
   - Wetlands that directly abut such tributaries.

B. The USACE and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:
   - Non-navigable tributaries that are not relatively permanent.
   - Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
   - Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

C. The USACE and EPA generally will not assert jurisdiction over the following features:
   - Swales or erosion features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow).
   - Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The significant nexus test includes consideration of hydrologic and ecologic factors. The significant nexus test would take into account physical indicators of flow (OHWM), if a hydrologic connection to a Traditionally Navigable Water (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and EPA will apply the significant nexus standard to assess the flow characteristics and functions of the tributary drainage to determine if it significantly affects the chemical, physical and biological integrity of the downstream TNW.

2.2 Waters of the State

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) (together "Boards") are the principal State agencies with primary responsibility for the coordination and control of water quality. The Boards regulate activities pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne Act) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

In the Porter-Cologne Act, the Legislature declared that the "State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation..." (California Water Code Section 13000). Porter-Cologne Act grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies [e.g., California Department of Fish and Wildlife (CDFW)] have the ability to enforce certain water quality provisions in state law.

2.3 Section 1602 of the California Fish and Game Code

Pursuant to Division 2, Chapter 6, Section 1602 of the CFG Code, an entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

As further defined by the California Code of Regulations (CCR) Title 14 Section 720, for the purpose of implementing Sections 1601 and 1603 of the California Fish and Game (CFG) Code, this applies to all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which may have intermittent flows of water. Furthermore, the Lake and Streambed Alteration (LSA) program requires notification for impacts to streams which

"includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water" (CDFW 2014).

Stream-dependent riparian habitat is defined in the CFG Code (Section 2785) as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." In addition, CDFW has jurisdiction over riparian habitats and wetlands associated with watercourses. As defined by CFG Code, "wetlands" means lands which may be covered periodically or permanently with shallow water and which include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, fens, and vernal pools. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of a stream or lake, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated riparian habitat not associated with a lake or streambed. The CDFW reviews proposed actions, and if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration (LSA) Agreement. Removal of stream-dependent riparian vegetation may also require an LSA Agreement from CDFW. However, CDFW may not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

3. Methods

3.1 Database and Literature Review

Prior to the jurisdictional delineation, a desktop analysis was conducted to obtain contextual information relevant to the project site and immediate surroundings. ESA conducted a review of available background information pertaining to the project, geography, and topography prior to conducting the jurisdictional delineation. A site map was generated with available aerial photographs and potentially jurisdictional features were identified and marked with lines and global positioning system (GPS) coordinates to assist in field verification. Soil types mapped within the project were reviewed on the NRCS web soil survey prior to field efforts to target areas with potentially hydric soils (NRCS 2018). The National Wetlands Inventory (NWI) wetlands mapper was viewed to determine if previously mapped wetland resources occur on or immediately adjacent to the project site (USFWS 2018).

3.2 Field Survey

ESA biologist Tommy Molioo conducted the jurisdictional delineation survey on January 12, 2018, to evaluate potentially jurisdictional features within and adjacent to the project site (survey area boundary). The limits of potential jurisdictional features were recorded in the field using aerial maps and a Trimble GPS unit.

Mapping Vegetation Communities

Vegetation communities are assemblages of plant species that occur together in the same area and are defined by species composition and relative abundance. The vegetation communities mapped

on the project site were identified based on the aggregation of plants and wildlife and the composition and structure of the dominant vegetation observed at the time the field survey was conducted. Vegetation communities were characterized based on the presence of dominant plant species and delineated within the project site. Vegetation community classification and descriptions were determined according to *A Manual of California Vegetation, 2nd Edition* (Sawyer et al. 2009), the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), and amended as deemed appropriate based on field observations and technical expertise. Plant taxonomy followed Baldwin, et al. (2012).

Delineating Wetland Waters of the U.S.

The presence/absence of wetland waters of the U.S. was determined through implementation of the methods described in the *U.S. Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987). The definition of growing season and the basis of determining and recording indicators for hydrophytic vegetation, hydric soils, and wetland hydrology was based on the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region (Version 2.0).*

A Level 2 Determination (i.e., onsite inspection) was conducted as defined in the 1987 USACE Manual. The onsite inspection evaluated the three parameters that identify and delineate the boundaries of jurisdictional wetlands, including (1) the dominance of wetland vegetation; (2) the presence of hydric soils; and (3) hydrologic conditions that result in periods of inundation or saturation on the surface from flooding or ponding. The National List of Plant Species That Occur in Wetlands in the Arid West Region was used to determine the wetland indicator status of plants observed in the project site. The 1987 USACE Manual and 2008 Arid West Regional Supplement were used for the analysis and evaluation of any normal circumstances, atypical situations, and problem areas, as needed.

Data on vegetation, soils, and hydrologic characteristics were recorded in the field and data points were taken to identify boundaries between upland and wetland habitats. All sample locations were examined for the presence of positive hydrologic indicators (i.e., direct evidence of saturated soils, oxidized rhizospheres). Soils were examined to determine composition, matrix color and the presence of redoximorphic features or other hydric soil indicators. The percent dominance by hydrophytic vegetation was also recorded at each sample location. The Wetland Determination Data Forms for the Arid West Region (Version 2.0) were prepared for sample sites within drainage features that exhibited potential wetland features, which are located in **Appendix B**.

Delineating Non-Wetland Waters of the U.S.

The USACE-jurisdictional status of the project was determined by in-field verification of the hydrological connection between the watercourse and downstream TNW. Non-wetland waters of the U.S. were identified if the OHWM was clearly visible and if there was a visible hydrological connection to a TNW (the Pacific Ocean), but one or more of the remaining USACE wetland parameters were absent (i.e., hydrophytic vegetation or hydric soils). The OHWM of channels

was determined based on observations of physical evidence that included direct observations of flow, scour marks, and drift lines of debris. The limits of non-wetland waters were confined to the ordinary limits of flow and excluded adjacent upland areas that have been created through the previous placement of fill material from grading activities. Delineation methods and data sheets were completed in accordance with *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b), and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010).

Delineating Waters of the State

It is assumed for the purpose of this report that USACE jurisdictional areas are also under the jurisdiction of the Los Angeles RWQCB, and are subject to Section 401 of the CWA or Porter-Cologne Act. USACE and RWQCB jurisdictional areas have been delineated using the same methodology.

Delineating Limits of CFGC Section 1602

CDFW jurisdictional waters included streams which show evidence of at least intermittent flow including the floodplain and wetland or riparian habitats associated with watercourses in accordance with Section 1600 et al. of CFG Code. These areas were delineated by the outer edge of riparian vegetation or at the top of the bank of a stream or lake, whichever was wider. Under CFG Code, "wetlands" are defined as lands which may be covered periodically or permanently with shallow water and which include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, fens, and vernal pools (CFG Code Section 2785).

CDFW wetlands were delineated based on a one parameter definition (California Code of Regulations Title 14 (14 CCR)) that only requires evidence of a single parameter to establish wetland conditions: *Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats (14 CCR Section 13577).*

4. Results

4.1 Existing Conditions

The project site is located within the Victoria Park Golf Course, which was constructed in 1966 atop the former BKK Carson Landfill that operated from 1948 to 1960 (DTSC 2016). The project site has been used for recreational golf activities continuously since 1966, which has prevented the re-introduction of native vegetation communities throughout the site. As such, the project site

has remained in a disturbed condition for several decades and the project site is now characterized by landscaped sod grass and trees, with areas of bare ground and development (e.g. pro shop, parking lot, cart paths, etc.), and scattered pockets of native vegetation.

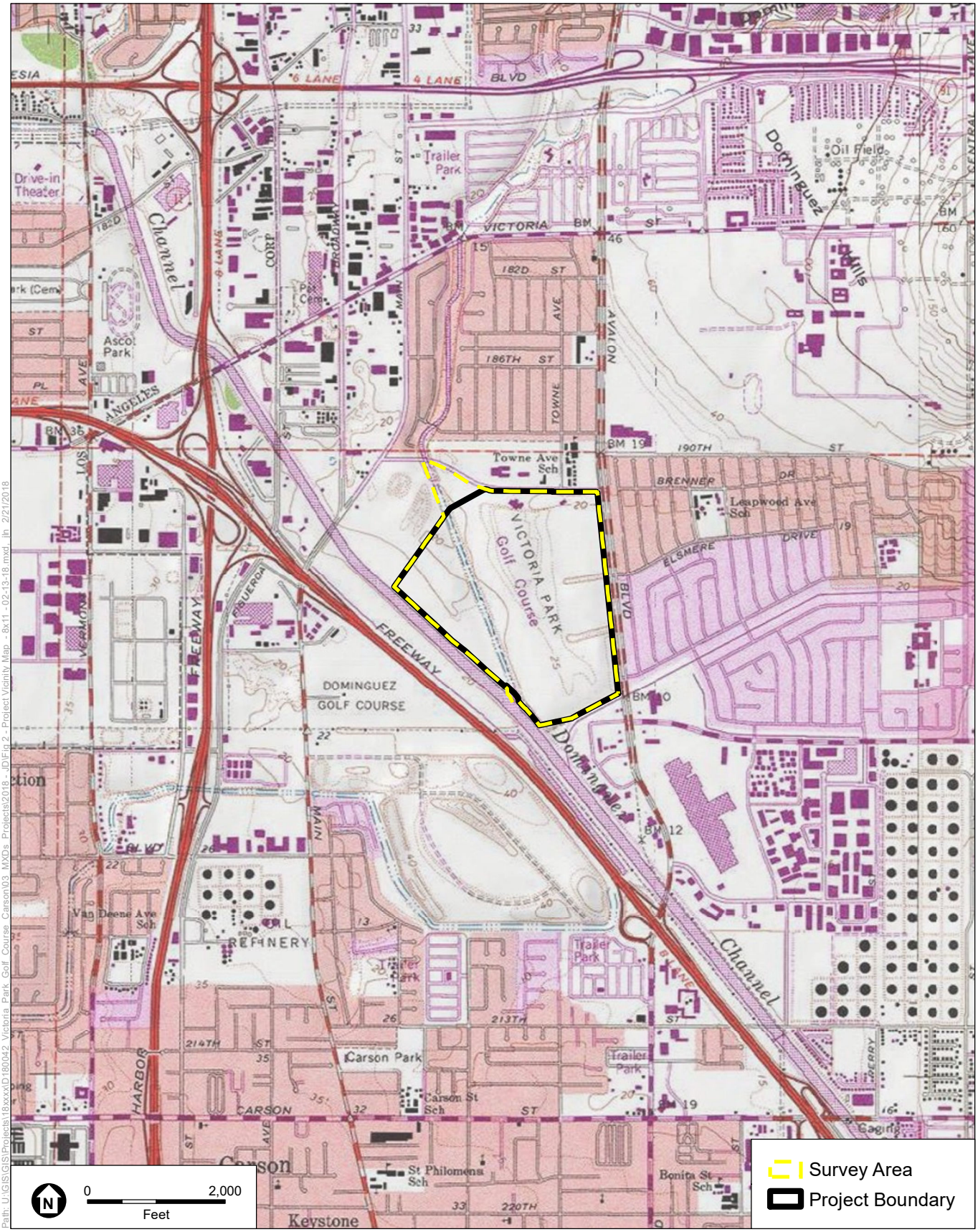
The drainage channel on the project site is mapped as an intermittent blue-line stream on the *Torrance, California* USGS 7.5-minute topographic quadrangle map (**Figure 2**). This blue-line stream historically and currently connects to the Dominguez Channel. The drainage channel that runs along the western portion of the project site contains a disturbed marsh habitat with non-native trees along the slopes. The elevation on the project site is relatively flat, ranging from approximately 25 feet above mean sea level (AMSL) in the northern portion of the site to approximately 30 feet AMSL in the southern portion of the site.

4.1 Soils

The U.S Department of Agriculture Natural Resources Conservation Service (NRCS) maps the majority of the project site as complexes of several soil types including the following: Urban land-Biscailuz-Hueneme, drained complex, Urban land-Thums-Windfetch complex, Urban land-Aquic Xerorthents, fine substratum-Cropley complex, and Urban land-Windfetch-Typic Haploxerolls complex (**Figure 3**). According to the NRCS, none of these soils are considered hydric. The observed surface soils show evidence of previous and continued disturbance due to golf course operations and maintenance activities. The previous grading and degradation to the natural soil horizons has created complexes of mixed native soil and urban land that has either been constructed upon, compacted, and/or consists of fill material.

Urban land-Biscailuz-Hueneme, drained complex

Biscailuz soils consist of very deep, somewhat poorly drained soils that formed in alluvium from mixed rock sources. Biscailuz soils are typically on floodplains and lowlands, with slopes ranging from 0 to 5 percent. Hueneme soils have grayish brown, loamy fine sand and light sandy loam, with moderately alkaline A horizons and stratified, calcareous C horizons of sandy loams through sands with thin silt layers, mottled, and containing segregated gypsum. These soils are mixed with fill material from previous grading of urban land, and are well drained. Hueneme soils are typically hydric in California and occur on tidal flats. However, the previous disturbances to the land has removed much of the native composition of this soil and altered the natural topography to remove any remnants of a tidal flat community. The majority of the project site consists of this soil type.

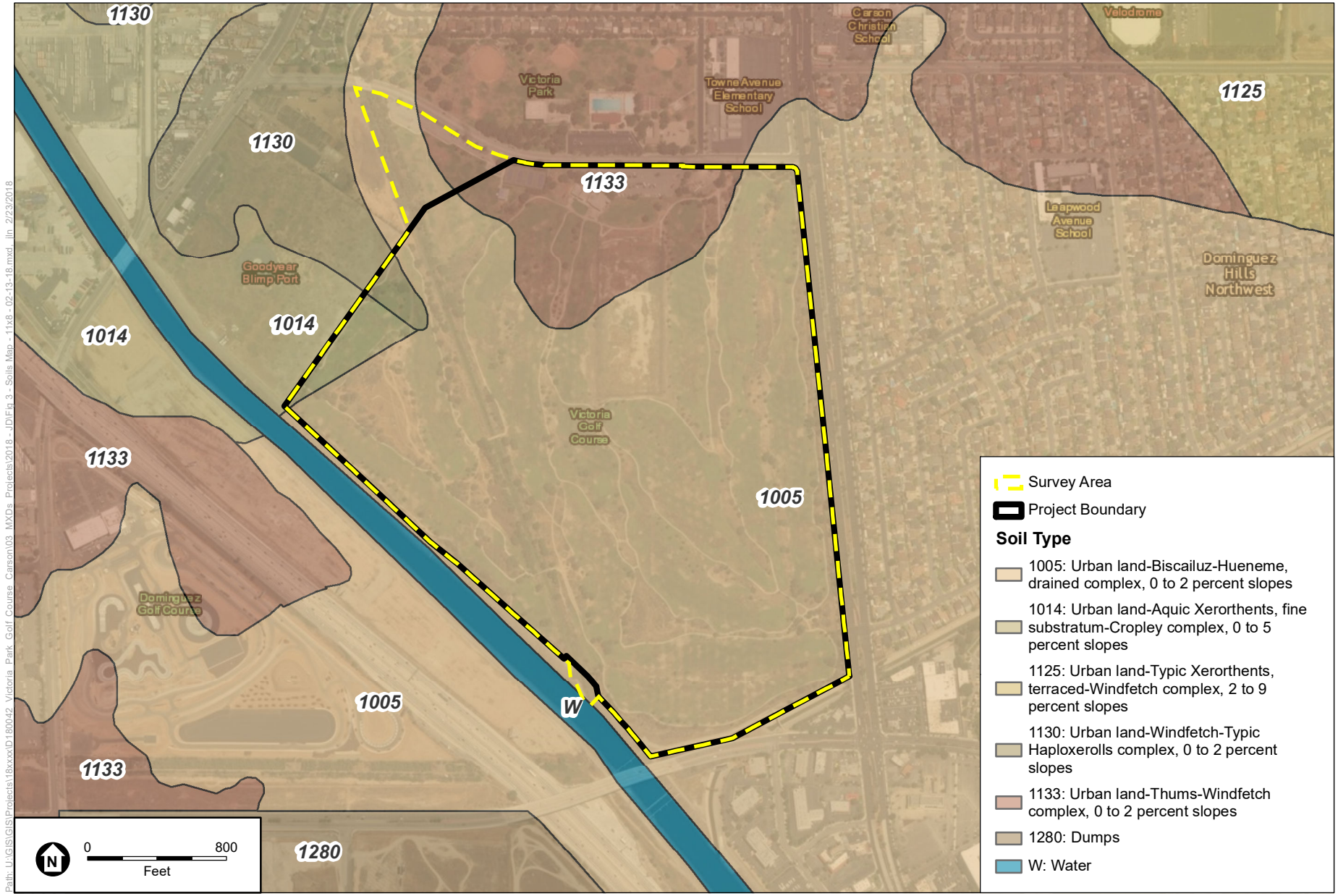


SOURCE: USGS 7.5' Topo Quad Torrance 1978, 1982

Victoria Park Golf Course Redevelopment

Figure 2
USGS Topographic Map

ESA



SOURCE: SSURGO; ESRI

Victoria Park Golf Course Redevelopment

Figure 3
Soils Map

ESA

Urban land-Thums-Windfetch complex

Thums soils consist of very deep, well drained soils that formed in uplifted alluvium from mixed rock sources and have a thin mantle of human transported material at the surface. These soils typically occur on terraces and fan remnants, with slopes ranging from 0 to 12 percent. Windfetch soils consist of well drained soils that formed in a thin, discontinuous layer of human transport materials overlying uplifted alluvium from marine and other mixed rock sources. These soils typically occur on uplifted alluvium and terraces, with slopes ranging from 0 to 12 percent. This soil complex does not contain hydric soils, and has been substantially altered from its natural composition due to previous disturbances.

Urban land-Aquic Xerorthents, fine substratum-Cropley complex

Aquic xerorthents are soils that have, in one or more horizons within 100 cm of the mineral soil surface, redox depletions with chroma of 2 or less and also aquic conditions for some time in normal years (or artificial drainage). The soils typically occur on low terraces in the western part of the United States and are not extensive. Cropley soils consist of very deep, moderately well and well drained soils that formed in alluvium from mixed rock sources. Cropley soils typically occur on alluvial fans, floodplains and in small basins, with slopes ranging from 0 to 15 percent.

Urban land-Windfetch-Typic Haploxerolls complex

As described above, windfetch soils consist of well drained soils that formed in a thin, discontinuous layer of human transport materials overlying uplifted alluvium from marine and other mixed rock sources. The typic subgroup of Haploxerolls is fixed on freely drained soils that have a xeric moisture regime and do not have aquic conditions within 75 cm of the mineral soil surface. By definition, these soils are not hydric and due to the previous disturbances on the project site this complex of soils has been altered from its natural composition.

4.2 Vegetation

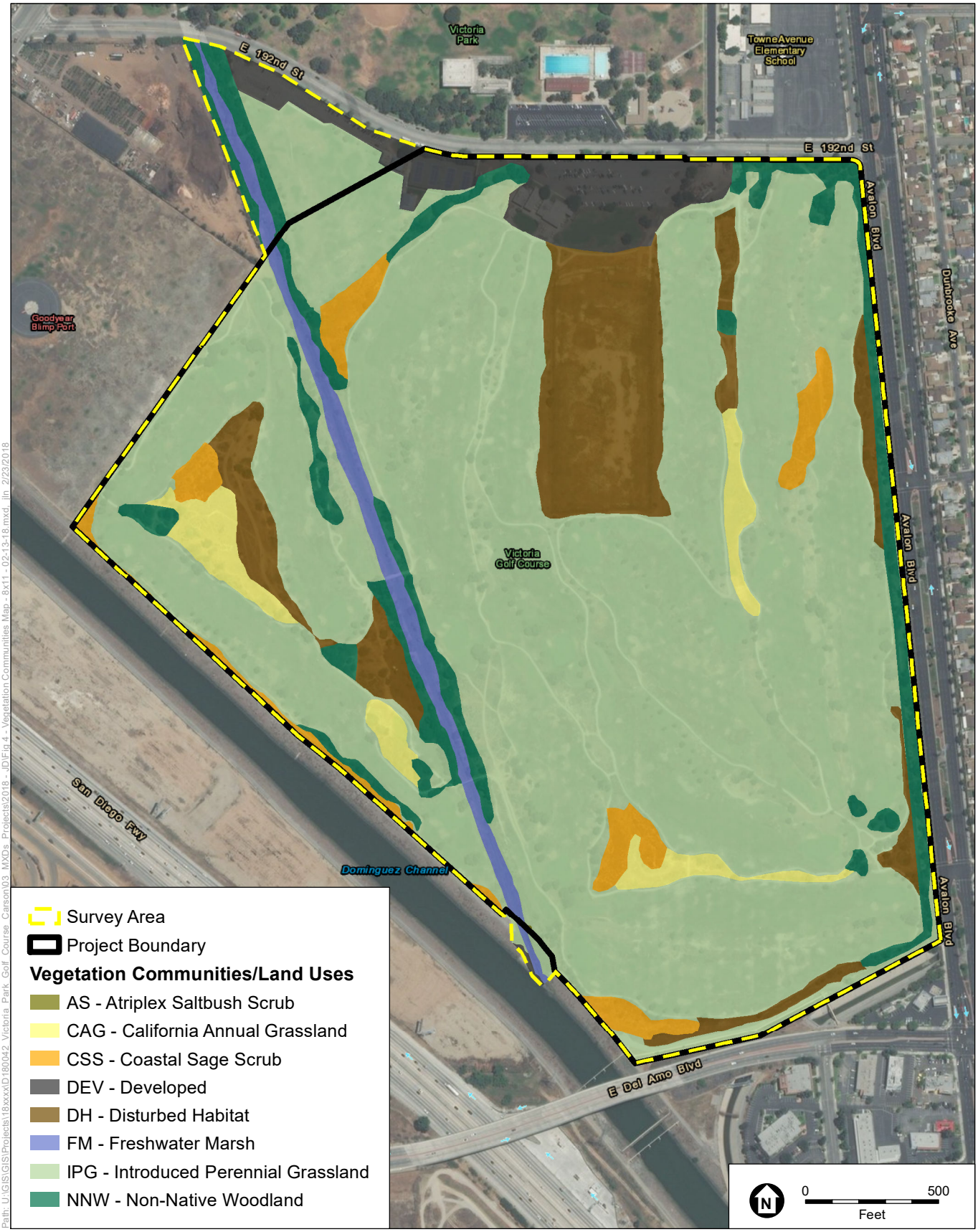
The project is characterized and dominated by non-native and disturbed habitat with scattered native vegetation communities and a disturbed drainage (**Figure 4**). Within the project site, the most dominant cover type is introduced perennial grassland which mainly consists of landscaped sod grass installed for use on the golf course. Other vegetation communities within the project site that were observed less frequently include California annual grassland, atriplex scrub, coastal sage scrub, freshwater marsh, and non-native woodland. Land use types on the project site include disturbed habitat, and developed land. Disturbed habitat is the second most abundant land use type on the project site. **Table 1** displays the mapped vegetation communities and calculated acres on the project site and in adjacent offsite areas within the survey area. A complete list of the botanical species observed/detected in the survey area during surveys of the site is provided in **Appendix C**. The discussion of each vegetation community is included further below.

TABLE 1
VEGETATION COMMUNITIES AND LAND USE TYPES

Vegetation Community (Holland Code)	Project Site (acres)	Off Site (acres)	Survey Area Total (acres)
Riparian and Wetlands			
Freshwater Marsh (disturbed)	3.34	0.89	4.23
Uplands			
Atriplex Scrub	0.01		0.01
California Annual Grassland	4.93		4.93
Coastal Sage Scrub	5.51		5.51
Introduced Perennial Grassland	124.54	3.29	127.83
Non-Native Woodland	9.88	1.55	11.43
Other Cover Types			
Disturbed Habitat	17.03		17.03
Developed	6.36	1.56	7.93
Grand Total	**171.63**	**7.29**	**178.92**

Freshwater Marsh (disturbed)

Freshwater marsh is a low to medium-growing native plant community that occurs in low-lying areas that are seasonally or permanently flooded with freshwater. Vegetation within this community is dominated by riparian herbaceous and shrub species that are generally associated with drainages and riverine features. The freshwater marsh on the project site is substantially disturbed due to past grading activities from installation of the drainage channel during golf course construction, introduction of non-native species from upstream sources, and as a result of recreational activities. Freshwater marsh occurs along the bottom of the drainage channel, immediately adjacent to the low-flow channel that has a concrete bottom. Species observed in this community include saltgrass (*Distichlis spicata*) [FACW], tule (*Schoenoplectus acutus* var. *occidentalis*) [OBL], cocklebur (*Xanthium strumarium*) [FAC], salt cedar (*Tamarix ramosissima*) [FAC], mulefat (*Baccharis salicifolia*) [FAC], Gooding's willow (*Salix gooddingii*) [FACW], and blue elderberry (*Sambucus nigra* ssp. *caerulea*) [FACU]. These plants are hydrophytic and indicative of wetland areas, and have established on sediment that has been deposited atop the concrete-bottom channel, adjacent to the low-flow channel.



SOURCE: ESRI

Victoria Park Golf Course Redevelopment

Figure 4
Vegetation Communities and Land Uses Map

ESA

Atriplex Scrub

Two small stands of a medium-growing scrub community dominated entirely by big saltbush (*Atriplex lentiformis*) [FAC], occurs at the southwestern boundary of the project site, immediately adjacent to the Dominguez Channel. This scrub community is isolated from any other native scrub habitat, and is the only stand of atriplex on the project site. This community occurs at the top of the east and west bank of the downstream end of the drainage channel. While big saltbush can occur in either wetlands or uplands, this vegetation community functions entirely as an upland vegetation community on the project site.

California Annual Grassland

California annual grassland is generally dominated by invasive, non-native annual grasses of various species and may contain a small percentage of non-native herbaceous species. It usually occurs in areas of previous disturbance located on fine-textured, well-drained soils that are moist in winter but very dry in summer months, and frequently intergrades with disturbed habitats. The California annual grassland community on the project site occurs in patches scattered throughout the project site adjacent to areas of introduced perennial grassland and disturbed habitat. Species observed in the California annual grassland community include a mix of non-native grasses, and herbaceous ruderal forbs such as ripgut brome (*Bromus diandrus*) [UPL], red brome (*Bromus madritensis* ssp. *rubens*) [UPL], slender oat (*Avena barbata*) [UPL], Russian thistle (*Salsola tragus*) [UPL], short-podded mustard (*Hirschfeldia incana*) [UPL], cheeseweed (*Malva parviflora*) [UPL], and lamb's quarters (*Chenopodium album*) [FACU].

Coastal Sage Scrub

Areas mapped as coastal sage scrub on the project site occur as isolated stands of habitat in areas outside of active golf course fairways. These isolated stands are either remnants from the previous habitat historically on the project site or were planted during construction of the golf course. Due to the previous and existing disturbances on the project site the coastal sage scrub community is relatively sparse and low-growing. The lack of continuity with larger stands of undisturbed native scrub also reduces the quality of the habitat onsite. Species observed in the coastal sage scrub include native upland plants such as California sagebrush (*Artemisia californica*) [UPL], California buckwheat (*Eriogonum fasciculatum*) [UPL], deerweed (*Acmispon glaber*) [UPL], yerba santa (*Eriodictyon angustifolium*) [UPL], coyote brush (*Baccharis pilularis*) [UPL], and bush sunflower (*Encelia californica*) [UPL].

Introduced Perennial Grassland

Introduced perennial grassland is described by Sawyer, Keeler-Wolf (1995) where introduced grasses dominate extensive areas on uplands with textured clay, loam, and sandy soils. Species commonly observed include a mix of upland non-native grasses such as brome grasses, ryes, fescues, and bluegrasses, which are all common species within recreational parks that are regularly maintained. The regular irrigation on the project site keeps this grassland community perennially green. Areas mapped as introduced perennial grassland include all grass areas associated with the golf course. Paved concrete cart paths meander throughout the mapped

introduced perennial grassland habitat. The cart paths do not contain vegetation but were not included in Figure 4 due to the scale of the mapping effort.

Non-Native Woodland

The non-native woodland community on the project site consists of landscaped ornamental trees that are regularly maintained and were planted on the project site for aesthetic purposes related to the golf course. Trees were planted as isolated stands throughout various locations on the golf course, and as rows along fairways and the drainage channel. Species observed within the non-native woodland community include pine (*Pinus* sp.) [UPL], olive (*Olea* sp.) [UPL], Peruvian pepper (*Schinus molle*) [FACU], and Mexican fan palm (*Washingtonia robusta*) [FACW]. The non-native woodland associated with the drainage channel occurs entirely on the top of banks

Disturbed Habitat

Typical disturbed habitat areas have undergone intense physical transformation due to prior disturbance (usually from past development or agriculture) and is no longer recognizable as a native or naturalized vegetation association but continues to retain a soil substrate. Disturbed habitat areas on the project site are those that have been previously graded or had vegetation removed and now contain compacted bare ground with little to no vegetation. The only vegetation observed in these areas were scattered non-native grasses and ruderal (weedy) forbs such as red brome, short-podded mustard, and Russian thistle.

Developed

Developed land is generally described as areas that have been cleared of native vegetation and soils have been compacted and constructed upon with buildings, roads, and infrastructure. Developed land is mapped for the golf course facility buildings and parking lot. The paved cart paths that meander throughout the golf course are also considered developed land but were not mapped due to the scale of the vegetation mapping. The only vegetation observed within areas mapped as developed include landscaped non-native trees that were planted for aesthetic purposes such as pine and olive trees.

4.3 Hydrology

The hydrology on the project site is connected to the Dominguez Channel, which is part of the Dominguez Watershed. As described by the Los Angeles County of Public Works, the Dominguez Watershed is located within the southern portion of Los Angeles County, and encompasses approximately 133 square miles of land and water (LACDPW 2014). Approximately 81 percent of the watershed or 93 percent of the land is developed. Residential development covers nearly 40 percent of the watershed, and another 41 percent is made up by industrial, commercial and transportation uses. With a population of nearly 1 million, considerable demands are made on infrastructure and services within the watershed.

Hydrology within the project site is specifically provided from upland runoff upstream of the drainage channel that originates north of the project site within an historic intermittent blue-line

stream. Currently, upstream of the drainage channel flows originate from a storm drain culvert at Avalon Boulevard. Flows continue downstream through a concrete-lined channel that contains little to no vegetation. The concrete-lined channel passes below State Route 91 through a culvert and outlets into an earthen-bottom channel with a mix of native and non-native trees and riparian vegetation. Flows re-enter a concrete-lined channel at Victoria Street and continue south to a culvert at East 192nd Street before entering the drainage channel immediately north of the project site, continuing through the project site on a concrete-bottom with earthen bottom slopes. The drainage channel on the project site directly connects to the Dominguez Channel, a Relatively Permanent Water (RPW), which eventually outlets into the Los Angeles Harbor and the Pacific Ocean, a Traditional Navigable Water (TNW).

NWI Wetland Classification

The National Wetland Inventory (NWI) identifies one class of wetlands to occur within the drainage channel in the project boundary, Riverine Intermittent Streambed (R4SBCr).

R System RIVERINE: The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.

4 Subsystem INTERMITTENT: This Subsystem includes channels that contain flowing water only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.

SB Class STREAMBED: Includes all wetlands contained within the Intermittent Subsystem of the Riverine System and all channels of the Estuarine System or of the Tidal Subsystem of the Riverine System that are completely dewatered at low tide.

Subclass Modifiers

C WATER REGIME Seasonally Flooded: Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.

4.4 Jurisdictional Features Summary

The potential jurisdictional feature delineated within the survey area boundary, including the project site, is shown on **Figure 5**, and further described on the following pages. The mapped potential jurisdictional feature is based on the database and literature review and field delineation survey, and is summarized in **Table 2** below.



SOURCE: ESRI

Victoria Park Golf Course Redevelopment

Figure 5
Jurisdictional Delineation Map

ESA

TABLE 2
SUMMARY OF JURISDICTIONAL FEATURES WITHIN THE SURVEY AREA

Map ID	Type of Feature	Habitat Type
Drainage Channel	Intermittent Drainage Channel	Freshwater Marsh and Non-Native Woodland

Drainage Channel

The site has been used for recreational golf consistently since 1966 and mainly has been operated by the Los Angeles County Department of Parks and Recreation. The Drainage Channel on the western portion of the project site was installed during conversion of the former landfill into a golf course, which now drains local runoff from upstream areas to the south towards the Dominguez Channel. Historically, the topography on the project site and to the immediate north of the site, did not support a natural drainage feature; however, an intermittent blue-line stream is mapped on 1959 USGS topo maps further to the north that was connected to the Drainage Channel on the project site during development of the area in the 1960's (NETR 2018). The Drainage Channel contains a concrete-lined low-flow channel bottom, with freshwater marsh vegetation growing on sediment deposited on the channel floodplain, and earthen manufactured slopes that contain non-native woodland species. The Drainage Channel currently conveys runoff and stormwater flows from upstream sources north of the project site, downstream (south) towards the Dominguez Channel.

4.5 Potential Regulatory Jurisdiction

Waters of the U.S./State

Based on the results of the sample wetland pits discussed below, the project site does not support wetland waters of the U.S. However, the Drainage Channel is considered non-wetland waters of the U.S. potentially subject to the jurisdiction of USACE. RWQCB jurisdiction was found to be concurrent with Wetland and Non-Wetland Waters of the U.S. The potential limits of regulatory jurisdiction of the Drainage Channel are further described below.

Drainage Channel

The Drainage Channel on the project site was manufactured during construction of the golf course in the 1960's, and connects to an intermittent blue-line channel upstream and the Dominguez Channel, a RPW downstream. The Drainage Channel contains a concrete-lined low-flow channel, adjacent channel bottom that contains deposited sediment that supports an emergent marsh habitat, and upland slopes that contain non-native woodland habitat. An observable OHWM for the Drainage Channel was delineated out to the edge of the active floodplain where it meets the toe of slope of the upland banks. The OHWM was fairly uniform throughout the survey area, and averaged 25 feet in width. A change in vegetation and hydrology was observed at the edge of the active floodplain.

A single pair of data points was taken within the Drainage Channel, one (DP1) within the active floodplain adjacent to the concrete low-flow, and one (DP2) on the adjacent upland slopes. Data point DP1 contains gleyed soils with a color of Gley 1 3/10Y and a silty muck texture throughout the entire 12-inch soil sample. The sample showed no evidence of redoximorphic features and does not meet the characteristics of gloamy gleyed matrix or problematic hydric soils. Therefore, soils in this area are non-hydric, likely consisting of fill material from previous disturbances that has been regularly inundated with a high water table for an extended time period. A high water table was observed in DP1 and surface water was present immediately adjacent to DP1, in the low-flow channel. While there is evidence of wetland hydrology and vegetation at DP1, the soil sample lacks hydric soil indicators to be considered a wetland. Therefore, DP1 displays only two of the three parameters necessary to be considered a wetland by USACE, and is not a wetland water of the U.S.

A paired soil pit (DP2) was dug on the adjacent upland slopes on the channel banks to the northeast of DP1. Soil within DP2 contains an organic top layer of leaf litter within the first 3 inches, and within the remaining 12 inches displays a color of 7.5YR 2.5/2 and has a silty loam texture. No redoximorphic features were observed within the soil sample, and no hydric soil indicators were present. Therefore, DP2 lacks hydric soils capable of supporting wetland vegetation and conditions. Additionally, no signs of wetland hydrology were observed within and immediately adjacent to DP2, but hydrophytic vegetation is present with the adjacent pine and fan palm trees that can sometimes occur in wetlands. DP2 only contains one of the three wetland parameters to be considered a wetland, and is therefore, not a wetland.

CFGC Section 1602 Jurisdiction

CDFW jurisdiction included all non-wetland Waters of the U.S. described above, as well as upland banks, excluding adjacent non-native woodlands. The portion of the Drainage Channel on the project site potentially subject to CDFW jurisdiction is further described below.

Drainage Channel

In addition to the portions of Drainage Channel described under Waters of the U.S. above that are under the dual jurisdiction of the U.S. and State, CDFW jurisdiction includes the adjacent upland sloped banks. The average width of the streambed mapped during the jurisdictional delineation was 25 feet. CDFW mapped jurisdiction included the top of each bank, and included portions of the non-native woodland vegetation that are rooted in the limits of the Drainage Channel and are hydrologically supported by Drainage Channel. Additionally, these trees are predominantly non-native and do not provide suitable habitat for special-status species, particularly least Bell's vireo (*Vireo bellii pusillus*) or southwestern willow flycatcher (*Empidonax traillii extimus*). Therefore, CDFW jurisdiction is generally uniform throughout the reach of the Drainage Channel on the project site.

5 Discussion and Conclusions

The total areas mapped during the delineation survey that may be subject to the jurisdiction of USACE, RWQCB, and/or CDFW are summarized below. These estimates are preliminary and the final determination of jurisdiction will be determined by each regulatory agency during the permitting/approval process. The estimated acreages are summarized in **Table 3** and **Table 4**, and further discussed below. The drainage channel was surveyed for the entire reach from East 192nd Street downstream to the Dominguez Channel, including both areas on the project site and immediately offsite (survey area boundary).

5.1 Waters of the United States

Waters of the U.S. that are subject to the jurisdiction of the USACE under Section 404 of the CWA include the OHWM limits observed within the Drainage Channel. This feature is hydrologically connected to the Dominguez Channel, a RPW, which eventually outlets into the Los Angeles Harbor, which is directly connected to the Pacific Ocean, a TNW. As discussed above, this feature conveys upland runoff from urban development, downstream in an open channelized and sometimes earthen-bottom drainage feature, crossing below several roads through culverts, and eventually draining into the Pacific Ocean. The Drainage Channel is mapped as a riverine feature by the NWI, and based on the findings of the delineation survey is considered Non-Wetland Waters of the U.S. A total of 2.26 acres of Non-Wetland Waters of the U.S. was delineated within the survey area, comprising 1.61 acres within the project site and an additional 0.65 acre immediately offsite to the north and south. Non-Wetland Waters of the U.S. may be impacted by bridge crossings for the project, which would require obtaining a Section 404 CWA permit from the USACE.

TABLE 3
POTENTIAL USACE/RWQCB AQUATIC RESOURCES WITHIN THE SURVEY AREA

Aquatic Resource Name	Aquatic Resources Classification		Aquatic Resource Size (acres)	Aquatic Resource Size (linear feet)
	Cowardin	Location (lat/long)		
Drainage Channel	Riverine Intermittent Streambed Seasonally Flooded: Artificial Substrate (R4SBCr)	33.852172° -118.271869°	1.66 (onsite) 0.65 (offsite)	2,671 (onsite) 1,069 (offsite)

5.2 Waters of the State

The features described above as subject to USACE's jurisdiction also potentially fall under the authority of the Los Angeles RWQCB in accordance with Section 401 of the CWA. Therefore, a total of 2.26 acres of Non-Wetland Waters of the State was delineated within the survey area, comprising 1.61 acre occurs within the project site and an additional 0.65 acre immediately offsite to the north and south. RWQCB jurisdiction may be impacted by bridge crossings for the project and would require a Section 401 water quality certification from the Los Angeles RWQCB.

5.3 CFGC Section 1602 Jurisdiction

Areas under CDFW jurisdiction mapped in the project site include all Non-Wetland Waters of the State, as well as upland banks and associated habitats (Figure 5). Areas within the Drainage Channel with potential CDFW jurisdiction have been mapped to the outer limits of a defined bed and bank, and including portions of the non-native woodland that are rooted within the Drainage Channel, for a total of 7.14 acres of potential CDFW jurisdiction within the survey area. This is comprised of 5.11 acres of potential CDFW jurisdiction on the project site, and an additional 2.03 acres occurs immediately offsite to the north and south. CDFW jurisdictional areas may be impacted by bridge crossings for the project and would require obtaining a Section 1602 Streambed Alteration Agreement from CDFW.

TABLE 4
POTENTIAL CDFW JURISDICTION WITHIN THE SURVEY AREA

Map ID	Habitat Type	Onsite (acres)	Offsite (acres)	Total
Drainage Channel	Atriplex Saltbush Scrub	0.01	-	0.01
	Freshwater Marsh	3.28	0.85	4.13
	Introduced Perennial Grassland	0.51	0.22	0.73
	Non-Native Woodland	1.31	0.96	2.27
Total		**5.11**	**2.03**	**7.14**

6. Supplemental Information

6.1 Directions to the Project

From Downtown Los Angeles, head south on Interstate 110, take the West 190th Street exit east towards Main Street, turn south (right) onto Main Street, then east (left) onto East 192nd Street. The Victoria Park Golf Course is located approximately 0.5 mile to the south (right) of East 192nd Street.

6.2 Project Applicant Contact Information

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APPENDIX A
Site Photographs



Path: U:\GIS\GIS\Projects\18xxxx\D180042_Victoria_Park_Golf_Course_Carson\03_MXDs_Projects\2018 - JD\AppA - Site Photograph Location - 8x11 - 02-23-18.mxd dkaneshiro 2/23/2018

SOURCE: ESRI

Victoria Park Golf Course Redevelopment

Appendix A
Site Photograph Locations

ESA



PHOTOGRAPH 1: Taken from the southern survey area boundary, facing northwest towards the Drainage Channel.



PHOTOGRAPH 2: Taken from the southern survey area boundary, facing southeast towards the Drainage Channel.



PHOTOGRAPH 3: Taken from the southern portion of the Drainage Channel, facing northwest. Note non-native trees within the limits of the Drainage Channel.



PHOTOGRAPH 4: Taken from the southern portion of the Drainage Channel, facing southeast. Note disturbed upland banks.

D180042.00

SOURCE: ESA, 2018



PHOTOGRAPH 5: Taken near the center of the Drainage Channel, facing northwest.



PHOTOGRAPH 6: Taken near the center of the Drainage Channel, facing southeast. Note surface water in the low-flow channel, and a mix of native and non-native vegetation.



PHOTOGRAPH 7: Taken at DP1, facing northwest. Note freshwater marsh habitat in the active floodplain.



PHOTOGRAPH 8: Taken at DP1, facing southeast. Note native and non-native species.

D180042.00

SOURCE: ESA, 2018



PHOTOGRAPH 9: Taken at DP2, facing northwest. Note upland vegetation on the banks of the channel.



PHOTOGRAPH 10: Taken at DP2, facing southeast. Note disturbed habitat on the upland banks.



PHOTOGRAPH 11: Taken at the northern survey area boundary, facing northwest. Note concrete-lined channel north of the project site in offsite areas.



PHOTOGRAPH 12: Taken at the northern survey area boundary, facing southeast. Note non-native woodland dominates the upstream portion of the Drainage Channel within the survey area.

D180042.00

SOURCE: ESA, 2018

APPENDIX B

Wetland and OHWM Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Park Golf Course City/County: Carson/LA County Sampling Date: 1/12/18

Applicant/Owner: Shopoff Group State: CA Sampling Point: DP1

Investigator(s): Tommy Molioo Section, Township, Range: Sec 5, T4S, R13W

Landform (hillslope, terrace, etc.): drainage channel Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): C Lat: 33.852172° Long: -118.271869° Datum: NAD83

Soil Map Unit Name: Urban land-Biscailuz-Hueneme, drained complex NWI classification: R4SBCr

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** **Yes _____ No X**
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

Drainage Channel constructed for the golf course. Conveys flows to Dominguez Channel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	5	Yes	FACW
2.			
3.			
4.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Schoenoplectus acutus	10	Yes	OBL
2. Washingtonia robusta	1	No	FACW
3.			
4.			
5.			
	11 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Distichlis spicata	95	Yes	FACW
2. Washingtonia robusta	1	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	96 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 10	x 1 = 10
FACW species 102	x 2 = 204
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: 112 (A)	214 (B)

Prevalence Index = B/A = 1.91

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X No _____**

Remarks:

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	Gley 1 3/10Y	100					silty muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 6

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Victoria Park Golf Course City/County: Carson/LA County Sampling Date: 1/12/18

Applicant/Owner: Shopoff Group State: CA Sampling Point: DP2

Investigator(s): Tommy Molioo Section, Township, Range: Sec 5, T4S, R13W

Landform (hillslope, terrace, etc.): drainage channel Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): C Lat: 33.852168° Long: -118.271957° Datum: NAD83

Soil Map Unit Name: Urban land-Biscailuz-Hueneme, drained complex NWI classification: R4SBCr

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** **Yes _____ No X**
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

Upland slopes adjacent to the Drainage Channel on the golf course. Paired data point to DP1

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	20	Yes	FACW
2. Pinus sp.	20	Yes	FACU
3.			
4.			
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 20	x 2 =	40
FAC species	x 3 =	
FACU species 20	x 4 =	80
UPL species	x 5 =	
Column Totals: 40 (A)		120 (B)

Prevalence Index = B/A = 3.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? **Yes X No _____**

Remarks:

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3								organic layer; leaf litter
3-12	7.5YR 2.5/2	100					silty loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project: Victoria Golf Course Redevelopment	**Date:** 1/12/18	**Time:** 09:00
Project Number: 180042.00	**Town:** Carson	**State:** CA
Stream: Intermittent	**Photo begin file#:** 1	**Photo end file#:** 12
Investigator(s): T. Molioo		

Y ☒ N ☐ Do normal circumstances exist on the site?	**Location Details:** Victoria Park Golf Course in the City of Carson
Y ☒ N ☐ Is the site significantly disturbed?	**Projection:** N/A **Datum:** N/A
Type: N/A	**Coordinates:** 33.852172°N / -118.271869°W

Notes:

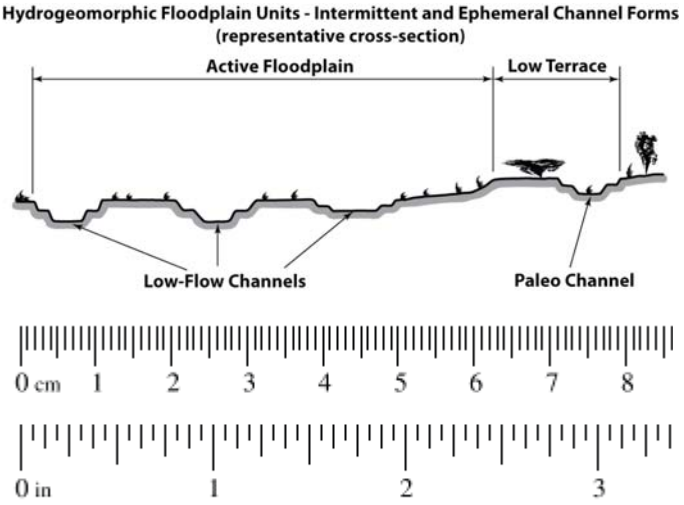
Brief site description: Disturbed Drainage Channel with a mix of native and non-native vegetation.

Checklist of resources (if available):

- ☒ Aerial Photography: (Dates: 2016)
- ☒ Topographic maps: (Scale: 1982)
- ☐ Geologic Maps
- ☒ Vegetation maps
- ☒ Soil Maps
- ☐ Rainfall/precipitation maps
- ☐ Existing Delineation(s) for site
- ☐ Global positioning system (GPS)
- ☐ Other Studies
- ☐ Stream gage data
  - Gage number:
  - Period of record:
- ☐ Clinometer / level
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2- ,5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

The dominant Wentworth size class that imparts a characteristic texture to each of a channel cross-section is recorded in the average sediment texture filed under the characteristics section for the zone of interest.

Inches (in)	Millimeters (mm)	Wentworth size class	
10.08	256	Boulder	
2.56	64	Cobble	Gravel
0.157	4	Pebble	
		Granule	
0.079	2.00		
0.039	1.00	Very coarse sand	
0.020	0.50	Coarse sand	
1/2 0.0098	0.25	Medium sand	Sand
1/4 0.005	0.125	Fine sand	
1/8 0.0025	0.0625	Very fine sand	
1/16 0.0012	0.031	Coarse silt	
1/32 0.00061	0.0156	Medium silt	Silt
1/64 0.00031	0.0078	Fine silt	
1/128 0.00015	0.0039	Very fine silt	
		Clay	Mud



☒	**Walk the channel and floodplain within the study area to get an impression of the vegetation and geomorphology present at the site. Record any potential anthropogenic influences on the channel system in "Notes" above.**
☒	**Locate the low-flow channel (lowest part of the channel). Record observations.** Characteristics of the low-flow channel: Average sediment texture: concrete-bottom Total veg cover: 0 % Tree: _____ % Shrub: _____% Herb: _____% Community successional stage: ☒ NA ☐ Mid (herbaceous, shrubs, saplings) ☐ Early (herbaceous & seedlings) ☐ Late (herbaceous, shrubs, mature trees) Dominant species present: None; concrete-bottom Other: ☐ _____ ☐ _____ ☐ _____ ☐ _____
☒	**Walk away from the low-flow channel along cross-section. Record characteristics of the lowflow/ active floodplain boundary.** Characteristics used to delineate the low-flow/active floodplain boundary: ☒ Change in total veg cover ☐ Tree ☐ Shrub ☒Herb ☒ Change in overall vegetation maturity ☒ Change in dominant species present ☐ Other ☐ Presence of bed and bank ☐ Drift and/or debris ☐ Other: _____ ☐ Other: _____
☒	**Continue walking the channel cross-section. Record observations below.** Characteristics of the active floodplain: Average sediment texture: Fill material; organic layer Total veg cover: 100 % Tree: 0 % Shrub: 10 % Herb: 90% Community successional stage: ☐ NA ☐ Mid (herbaceous, shrubs, saplings) ☒ Early (herbaceous & seedlings) ☐ Late (herbaceous, shrubs, mature trees) Dominant species present: Distichlis spicata Other: ☐ _____ ☐ _____ ☐ _____ ☐ _____

☒	**Continue walking the channel cross-section. Record indicators of the active floodplain/low terrace boundary.** Characteristics used to delineate the active floodplain/ low terrace boundary: ☐ Change in average sediment texture ☒ Change in total veg cover ☐ Tree ☒ Shrub ☐ Herb ☐ Change in overall vegetation maturity ☐ Change in dominant species present ☐ Other ☐ Presence of bed and bank ☐ Drift and/or debris ☐ Other: _____ ☐ Other: _____
☒	**Walk the active floodplain/low terrace boundary both upstream and downstream of the crosssection to verify that the indicators used to identify the transition are consistently associated the transition in both directions.** Consistency of indicators used to delineate the active floodplain/low terrace boundary: Y ☐ N ☒ Change in average sediment texture Y ☒ N ☐ Change in total veg cover ☒ Tree ☐ Shrub ☐ Herb Y ☒ N ☐ Change in overall vegetation maturity Y ☒ N ☐ Change in dominant species present Y ☐ N ☐ Other: Y ☐ N ☐ Presence of bed and bank Y ☐ N ☐ Drift and/or debris Y ☐ N ☐ Other: _____ Y ☐ N ☐ Other: _____
☐	**If the characteristics used to delineate the active floodplain/low terrace boundary were NOT consistently associated with the transition in both the upstream and downstream directions, repeat all steps above.**
☒	**Continue walking the channel cross-section. Record characteristics of the low terrace.** Characteristics of the low terrace: Average sediment texture: Sandy loam Total veg cover: 90 % Tree: 40 % Shrub: 10 % Herb: 40% Community successional stage: ☐ NA ☐ Mid (herbaceous, shrubs, saplings) ☐ Early (herbaceous & seedlings) ☒ Late (herbaceous, shrubs, mature trees) Dominant species present: _____ Other: ☐ _____ ☐ _____ ☐ _____ ☐ _____
☒	**If characteristics used to delineate the active floodplain/low terrace boundary were deemed reliable, acquire boundary.** Active floodplain/low terrace boundary acquired via: ☒ Mapping on aerial photograph ☒ GPS ☒ Digitized on computer ☐ Other: _____

APPENDIX C

Flora Compendia

Appendix C: Flora Compendia

Scientific Name	Common Name	Special Status
GYMNOSPERMS		
Pinaceae - Pine family		
Pinus sp.	Pine	
EUDICOTS		
Adoxaceae - Muskroot family		
Sambucus nigra ssp. caerulea	Blue elderberry	
Anacardiaceae - Sumac Or Cashew family		
* *Schinus molle*	Pepper tree	
Asteraceae - Sunflower family		
Artemisia californica	California sagebrush	
Baccharis pilularis	Coyote brush	
Baccharis salicifolia ssp. salicifolia	Mule fat	
Encelia californica	California brittlebush	
Xanthium strumarium	Cocklebur	
Boraginaceae - Borage family		
Eriodictyon angustifolium	Narrow-leaved yerba santa	CRPR 2.3
Brassicaceae - Mustard family		
* *Hirschfeldia incana*	Shortpod mustard	
Chenopodiaceae - Goosefoot family		
Atriplex lentiformis	Big saltbush	
* *Chenopodium album*	Lamb's quarters	
* *Salsola tragus*	Russian thistle, tumbleweed	
Fabaceae - Legume family		
Acmispon glaber	Deerweed, California broom	
Malvaceae - Mallow family		
* *Malva parviflora*	Cheeseweed, little mallow	
Oleaceae - Olive family		
* *Olea europaea*	Olive	
Polygonaceae - Buckwheat family		
Eriogonum fasciculatum	California buckwheat	
Salicaceae - Willow family		
Salix gooddingii	Goodding's black willow	
Tamaricaceae - Tamarisk family		
* *Tamarix ramosissima*	Saltcedar	
MONOCOTS		
Cyperaceae - Sedge family		

Scientific Name	Common Name	Special Status
Schoenoplectus acutus var. occidentalis	Common tule	
Poaceae - Grass family		
* *Avena fatua*	Wild oat	
* *Bromus diandrus*	Ripgut grass	
* *Bromus madritensis ssp. rubens*	Red brome	
Distichlis spicata	Salt grass	
Typhaceae - Cattail family		
Typha domingensis	Southern cattail	

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened

CRPR – California Rare Plant Rank
1A. Presumed extinct in California
1B. Rare or Endangered in California and elsewhere
2. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Threat Ranks
.1 - Seriously endangered in California
.2 – Fairly endangered in California

APPENDIX D-4

2018 Focused California Gnatcatcher Survey Report

DUDEK

27372 CALLE ARROYO
SAN JUAN CAPISTRANO, CALIFORNIA 92675
T 949.450.2525 F 949.450.2626

November 6, 2018 10991-10951

U.S. Fish and Wildlife Service
Attn: Recovery Permit Coordinator
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

Subject: ***2018 Focused California Gnatcatcher Survey Report for The Creek at Dominguez Hills Project and the Carol Kimmelman Sports and Academic Campus Project, City of Carson, California***

Dear Recovery Permit Coordinator:

This report documents the results of protocol-level presence/absence surveys for the coastal California gnatcatcher (*Polioptila californica californica*; CAGN). Non-breeding season focused surveys were conducted throughout all areas of suitable habitat (i.e., California sagebrush-California buckwheat scrub) for the proposed The Creek at Dominguez Hills project site and the adjacent Carol Kimmelman Sports and Academic Campus project site, located in the City of Carson, Los Angeles County, California (Figure 1). Suitable habitat for CAGN consists of approximately 14.9 acres of California buckwheat-California sagebrush scrub and California brittlebush-California sagebrush scrub within the combined study area (both project sites plus a 500-foot buffer). Dudek biologist Tommy Molioo (TE06873C-0.1) conducted CAGN surveys on the study area from August through September 2018.

The CAGN is a federally listed threatened species and a California Department of Fish and Wildlife (CDFW) Species of Special Concern. It is closely associated with coastal sage scrub habitat and typically occurs below 950 feet elevation and on slopes less than 40% (Atwood 1990), but CAGN have been observed at elevations greater than 2,000 feet. The species is threatened primarily by loss, degradation, and fragmentation of coastal sage scrub habitat, and is also impacted by brown-headed cowbird (*Molothrus ater*) nest parasitism (Braden et al. 1997).

LOCATION AND EXISTING CONDITIONS

The approximately 87-acre The Creek at Dominguez Hills project site and approximately 86-acre Carol Kimmelman Sports and Academic Campus project site (collectively referred to as the project sites) is located in predominantly developed area of the City of Carson, within land owned and operated by the County of Los Angeles (Figure 1). The study area for this survey

effort includes the combined boundary of the project sites, plus a 500-foot buffer around the project sites. Specifically, the study area is physically located southwest of the intersection of East 192nd Street (Martin Luther King Jr. Street) and Avalon Boulevard, within the existing Victoria Park Golf Course facility, northwest of Del Amo Boulevard and northeast of Interstate 405 (Figure 2).

The approximate centroid of the study area is at latitude 33.852773° North and longitude -118.269870° West within Sections 5, 6, and 8, Township 4 South, Range 13 West on the Torrance, California U.S. Geological Survey 7.5-minute topographic quadrangle map.

Elevations on the study area are relatively flat with some undulations and channels, with a range from approximately 5 feet to 30 feet above mean sea level. Soils mapped within the study area include: Urban land-Biscailuz-Hueneme, drained complex, Urban land-Thums-Windfetch complex, Urban land-Aquic Xerorthents, fine substratum-Cropley complex, and Urban land-Windfetch-Typic Haploxerolls complex.

VEGETATION COMMUNITIES

Twelve vegetation communities and land covers were identified within the study area, which are shown in Figure 2. The vegetation communities include: California buckwheat-California sagebrush association, California brittlebush-California sagebrush association, disturbed California buckwheat-California sagebrush association, fourwing saltbush alliance, freshwater marsh alliance, and Menzies's goldenbush alliance. Land covers within the study area include: open water, developed, disturbed habitat, non-native woodland, non-native grassland, and parks and ornamental plantings. Suitable CAGN habitat within the study area includes the California brittlebush-California sagebrush and California buckwheat-California sagebrush scrub, including disturbed portions of California buckwheat-California sagebrush scrub. These vegetation communities that provide suitable habitat for CAGN are described in detail below. These suitable habitat areas are highlighted in Figure 2.

California Brittlebush-California Sagebrush Association

The California brittlebush–California sagebrush association (*Encelia californica-Artemisia californica*) includes California sagebrush and black sage as the co-dominant shrubs in the canopy. This alliance has a continuous or intermittent shrub canopy less than 7 feet (2 meters) in height with a variable ground layer (Sawyer et al. 2009). Species associated with this alliance include chamise (*Adenostoma fasciculatum*), California brittlebush, Eastern Mojave buckwheat,

chaparral yucca, common deerweed, and white sage (Sawyer et al. 2009). This community occurs in the southern portion of the study area, in an area located between golf course fairways.

The California brittlebush-California sagebrush association does not have a state ranking, meaning it is apparently secure globally and is not vulnerable to extirpation or extinction in the state. This association is not considered a special-status vegetation community per CDFW (2010b).

California Buckwheat-California Sagebrush Association

The California buckwheat-California sagebrush association (*Eriogonum fasciculatum-Artemisia californica*) includes Eastern Mojave (California) buckwheat and California sagebrush as the co-dominant shrubs in the canopy. This association has a continuous or intermittent shrub canopy less than 7 feet (2 meters) in height with a variable ground layer that may be grassy (Sawyer et al. 2009). Species typically observed within this association include black sage (*Salvia mellifera*), white sage (*Salvia apiana*), California brittlebush (*Encelia farinosa*), chaparral yucca (*Yucca whipplei*), Mendocino bushmallow (*Malacothamnus fasciculatus*), Menzies' goldenbush (*Isocoma menziesii*), coyotebrush (*Baccharis pilularis*), and common deerweed (*Acmispon glaber* var. *glaber*) (Sawyer et al. 2009). This vegetation community association occurs in the western portion of the study area, along the boundaries of the existing golf course.

The California buckwheat-California sagebrush association does not have a state rank, meaning it is apparently secure globally and is not vulnerable to extirpation or extinction in the state. This association is not considered a special-status vegetation community per CDFW (2010b).

California Buckwheat-California Sagebrush Disturbance Mapping Unit

The California buckwheat-California sagebrush disturbance mapping unit is not recognized by the Natural Communities List (CDFG 2010). This mapping unit was used to differentiate areas co-dominated by California buckwheat and California sagebrush, but characterized by areas of disturbance particularly within the understory that creates a more open canopy. The California buckwheat scrub-California sagebrush association disturbance mapping unit within the study area is substantially disturbed from previous and ongoing disturbances. This community supports anywhere from 20% to 40% cover of native vegetation dominated by California buckwheat and 60% to 80% cover of non-native annual grasses, other non-native species, and bare ground. Although the California buckwheat-California sagebrush association within the study area is dominated by California buckwheat and California sagebrush, it also contains forbs and grasses dominated by bromes (*Bromus* spp.), wild oat (*Avena fatua*), fescue (*Festuca* sp.), black mustard,

stork's bill, and star-thistle (*Centaurea* sp.). This vegetation community occurs along the northwestern portion of the study area where the slope stabilization is proposed to occur.

The California buckwheat-California sagebrush association disturbance mapping unit does not have a state rank, meaning it is apparently secure globally and is not vulnerable to extirpation or extinction in the state. This association is not considered a special-status vegetation community per CDFW (2010b).

METHODS

The presence/absence focused survey for CAGN was conducted within the study area between August 8, 2018 and October 4, 2018. The survey was conducted in accordance with the schedule provided in Table 2. The specific areas surveyed and the survey route are depicted on Figure 2. Designated Critical Habitat for this species does not occur within the study area. The nearest designated Critical Habitat for CAGN is located approximately 6 miles southwest of the study area on the Palos Verdes peninsula.

Table 2
Survey Dates and Conditions

Date	Personnel	Temperature	Wind	Sky	Time
8/8/2018	Tommy Molioo	77°F–90°F	1–2 mph	0% cc	0824-1205
8/15/2018	Tommy Molioo	74°F–81°F	0–2 mph	10%-90% cc	0815-1132
8/22/2018	Tommy Molioo	75°F–81°F	1–2 mph	0% cc	0830-1208
8/29/2018	Tommy Molioo	76°F–80°F	1–2 mph	100% cc	0913-1200
9/5/2018	Tommy Molioo	72°F–78°F	1–2 mph	10%-20% cc	0800-1030
9/13/2018	Tommy Molioo	71°F–72°F	1–2 mph	0%-10% cc	0834-1044
9/20/2018	Tommy Molioo	71°F–74°F	1-2 mph	10% cc	0830-1045
9/27/2018	Tommy Molioo	72°F–74°F	1-2 mph	0% cc	0820-1134
10/4/2018	Tommy Molioo	68°F–75°F	1-4 mph	0%-50% cc	0909-1052

* Survey Conditions: °F = degrees Fahrenheit; cc = cloud cover; mph = miles per hour

The survey was conducted following the currently accepted protocol of the U.S. Fish and Wildlife Service (USFWS), *Coastal California Gnatcatcher* (*Polioptila californica californica*) *Presence/Absence Survey Protocol* (USFWS 1997). The non-breeding season survey included nine visits at a minimum of 7-day intervals, which is amended from the standard protocol of 14-day intervals as authorized by USFWS (USFWS 2018). In accordance with the protocol, no more than 80-acres of suitable habitat were surveyed by a

single biologist during each site visit. Survey routes are shown in Figure 2, and allowed for complete audible and visual coverage of all suitable CAGN habitat on site.

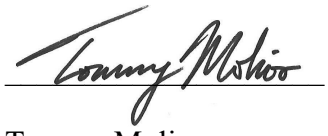
A 1:2,400-scale topographic map (1 inch = 200 feet) overlain with vegetation polygons and the study area was utilized during the survey. Additionally, digital mobile maps were used during the surveys to assist in navigating each survey area. Weather conditions, time of day, and season were appropriate for the detection of gnatcatchers and are provided in Table 2. Appropriate binoculars (e.g., 10x50 magnification) were used to aid in detecting and identifying bird species. A recording of gnatcatcher vocalizations was played approximately every 200 feet to induce responses from potentially present gnatcatchers. Vocalization-playback would have been terminated immediately upon detection of any gnatcatchers to minimize the potential for harassment.

RESULTS

There were no CAGN observed or detected within the study area during any of the nine focused surveys. A full list of bird species observed during the surveys and detected within proximity of the study area is provided in Attachment B. No potential nests suitable for CAGN were detected. Additionally, no predatory species for CAGN were observed during the surveys.

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

Sincerely,



Tommy Molioo
Permit # TE-06873C-0.1

Att: A, Figure 1, Project Location Map
Figure 2, CAGN Survey Route
B, Compendium of Wildlife Species Observed or Detected

REFERENCES

Atwood, J. L. 1990. *Status review of the California gnatcatcher (Polioptila californica*). Unpublished technical report Manomet Bird Observatory, Manomet, Massachusetts. 79pp.

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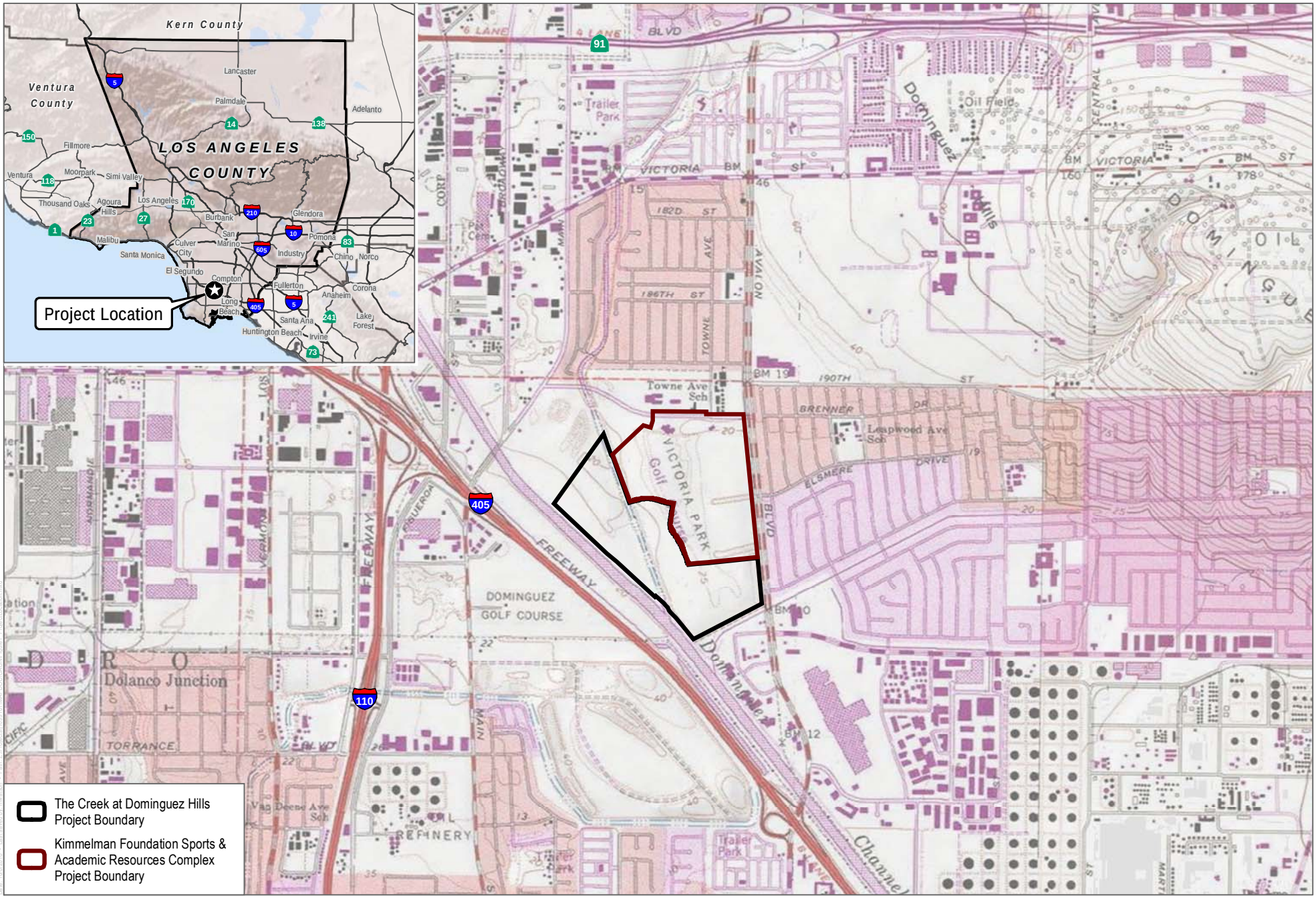
ATTACHMENT A

Figures



SOURCE: USGS 7.5 Minute Series Torrance Quadrangle

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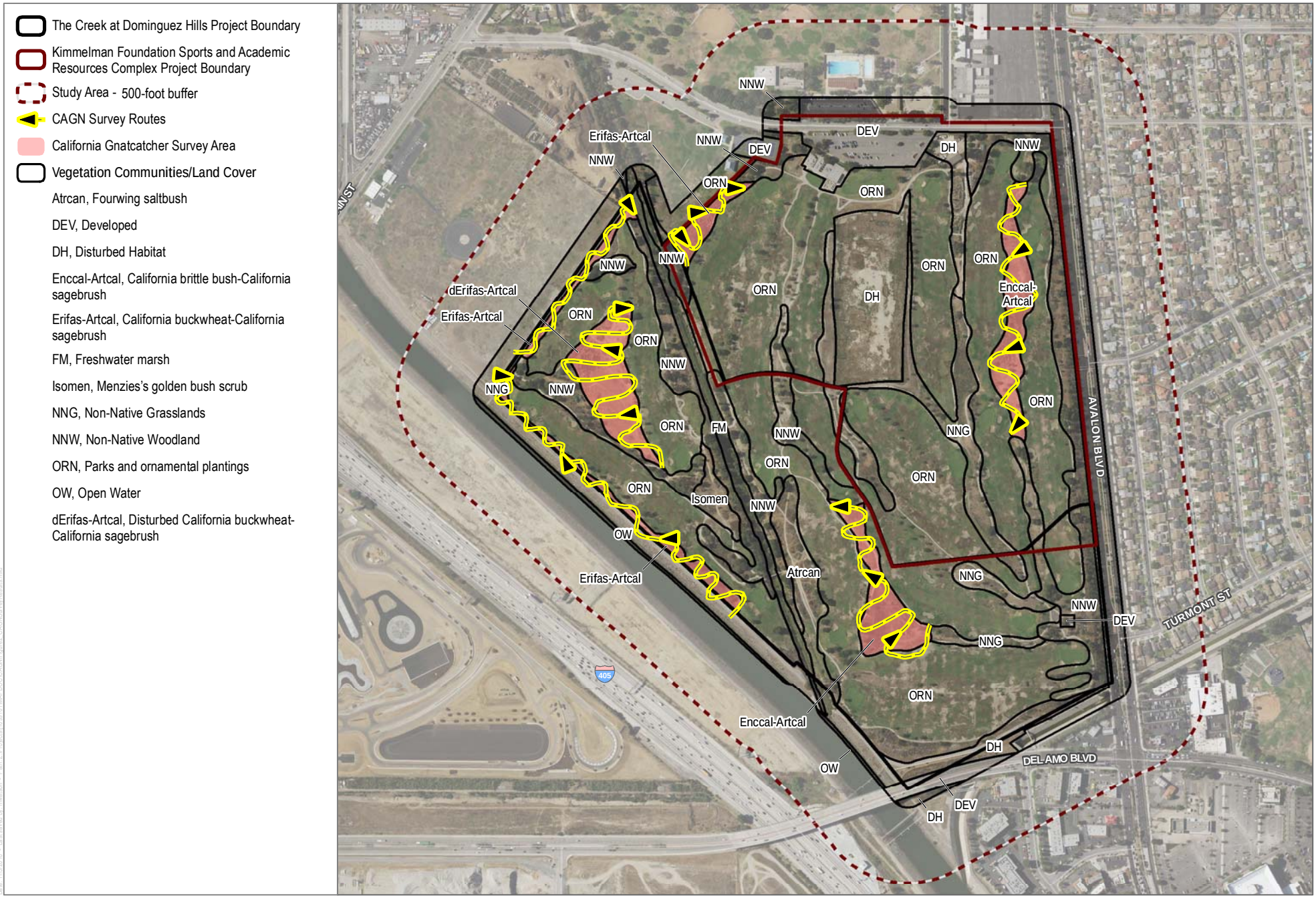
0 1,000 2,000 Feet

FIGURE 1

Project Location

The Creek at Dominguez Hills and Kimmelman Foundation Sports & Academic Resources Complex Projects



SOURCE: Los Angeles County 2011; USDA 2016

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FIGURE 2

California Gnatcatcher Survey Results

The Creek at Dominguez Hills and Kimmelman Foundation Sports & Academic Resources Complex Projects

ATTACHMENT B

Compendium of Wildlife Species Observed or Detected

ATTACHMENT B
Compendium of Wildlife Species Observed or Detected

WILDLIFE

BIRD

BLACKBIRDS, ORIOLES & ALLIES

ICTERIDAE—BLACKBIRDS
Euphagus cyanocephalus—Brewer's blackbird
Sturnella neglecta—western meadowlark

BUSHTITS

AEGITHALIDAE—LONG-TAILED TITS & BUSHTITS
Psaltriparus minimus—bushtit

CARDINALS, GROSBEAKS & ALLIES

CARDINALIDAE—CARDINALS & ALLIES
Piranga ludoviciana—western tanager

FALCONS

FALCONIDAE—CARACARAS & FALCONS
Falco mexicanus—prairie falcon
Falco sparverius—American kestrel

FINCHES

FRINGILLIDAE—FRINGILLINE & CARDUELINE FINCHES & ALLIES
Spinus psaltria—lesser goldfinch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS
Sayornis nigricans—black phoebe
Tyrannus verticalis—western kingbird
Tyrannus vociferans—Cassin's kingbird

HAWKS

ACCIPITRIDAE—HAWKS, KITES, EAGLES, & ALLIES
Buteo jamaicensis—red-tailed hawk
Circus hudsonius—northern harrier

HERONS & BITTERNS

ARDEIDAE—HERONS, BITTERNS, & ALLIES
Egretta thula—snowy egret

HUMMINGBIRDS

TROCHILIDAE—HUMMINGBIRDS
Calypte anna—Anna's hummingbird
Selasphorus sasin—Allen's hummingbird

PIGEONS & DOVES

COLUMBIDAE—PIGEONS & DOVES
Zenaida macroura—mourning dove

SHOREBIRDS

RECURVIROSTRIDAE—STILTS & AVOCETS
Himantopus mexicanus—black-necked stilt

CHARADRIIDAE—LAPWINGS & PLOVERS
Charadrius vociferus—killdeer

SHRIKES

LANIIDAE—SHRIKES
Lanius ludovicianus—loggerhead shrike

STARLINGS & ALLIES

STURNIDAE—STARLINGS
*Sturnus vulgaris—European starling**

SWALLOWS

HIRUNDINIDAE—SWALLOWS
Hirundo rustica—barn swallow
Petrochelidon pyrrhonota—cliff swallow
Stelgidopteryx serripennis—northern rough-winged swallow

THRUSHES

TURDIDAE—THRUSHES
Sialia mexicana—western bluebird

WOOD WARBLERS & ALLIES

PARULIDAE—WOOD-WARBLERS
Setophaga coronata—yellow-rumped warbler

NEW WORLD SPARROWS

PASSERELLIDAE—NEW WORLD SPARROWS
Melospiza melodia—song sparrow
Melozone crissalis—California towhee

MAMMAL

DOMESTIC

CANIDS

CANIDAE—WOLVES & FOXES
Canis latrans—coyote

HARES & RABBITS

LEPORIDAE—HARES & RABBITS
Sylvilagus audubonii—desert cottontail

POCKET GOPHERS

GEOMYIDAE—POCKET GOPHERS
Thomomys bottae—Botta's pocket gopher

SQUIRRELS

SCIURIDAE—SQUIRRELS
Spermophilus (Otospermophilus) beecheyi—California ground squirrel
*Sciurus niger—eastern fox squirrel**

REPTILE

LIZARDS

PHRYNOSOMATIDAE—IGUANID LIZARDS
Sceloporus occidentalis—western fence lizard
Uta stansburiana—common side-blotched lizard

* signifies introduced (non-native) species

APPENDIX E

Cultural Resources Study

CULTURAL RESOURCES STUDY FOR THE CAROL KIMMELMAN ATHLETIC AND ACADEMIC CAMPUS

340 East Martin Luther King Jr. Street
City of Carson, Los Angeles County, California

PREPARED FOR:

COUNTY OF LOS ANGELES
Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012
Contact: Ryan Kristan

PREPARED BY:

Sarah Corder, MFA; Erica Nicolay, MA; and Samantha Murray, MA

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38 North Marengo Avenue
Pasadena, California 91101

APRIL 2019

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EXECUTIVE SUMMARY

Dudek has been retained to complete a cultural resources study for the proposed Carol Kimmelman Sports and Academic Resources Center Project (project). The approximately 87-acre site consists of a portion of one parcel (APN 7339-017-917). The street address associated with the project site is 340 E. Martin Luther King Jr. Street (formerly E. 192nd Street) within the City of Carson, California.

Dudek's cultural resources study includes a California Historical Resources Information System (CHRIS) records search of the project site and a 0.5-mile radius, coordination with the California Native American Heritage Commission (NAHC) and local tribes/groups, a pedestrian survey of the project site for historic built-environment resources, building development and archival research, recordation and evaluation of two properties on the project site over 45 years of age, and an assessment of project-related impacts to historical resources in conformance with the California Environmental Quality Act (CEQA) and all applicable local municipal code and planning documents.

No cultural resources were identified within the project site as a result of the CHRIS records search, Native American outreach, survey, or property significance evaluations.

While the proposed project intends to develop only a portion of the existing golf course property, as a resource, the golf course property must be evaluated as a whole. Therefore, the boundaries of the resource evaluated (the Victoria Golf Course) extend beyond the project site boundaries. The buildings, structures, and golf course components located at 340 East Martin Luther King Jr. Street (formerly E. 192nd Street) are recommended not eligible under all National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) designation criteria and integrity requirements. Therefore, these properties are not considered historical resources for the purposes of CEQA, and no recommendations for management are required.

No archaeological resources were identified within the project site as a result of the CHRIS records search, Native American coordination, or pedestrian survey. To date, one response has been received from a representative of the Gabrielino Band of Mission Indians-Kizh Nation, stating that the project site may have potential for discoveries of cultural resources and recommending that a Native American monitor from their tribe be present for all ground disturbance. Should any more responses be received, they will be forwarded to the County. While the study was negative for archaeological resources, it is always possible that intact archaeological deposits are present at previously undisturbed subsurface levels. For these reasons, the project site should be treated as potentially sensitive for archaeological resources. Management recommendations to reduce potential impacts to unanticipated archaeological resources and human remains during construction activities are provided in Section 7.2.

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1 INTRODUCTION

Dudek has been retained to conduct a cultural resources study for the proposed Carol Kimmelman Sports and Academic Resources Campus Project (project). The cultural resources study included the following components: (1) a California Historical Resources Information System (CHRIS) records search at the South Central Coastal Information Center (SCCIC) covering the proposed project site plus a 0.5-mile radius, (2) a review of the California Native American Heritage Commission's (NAHC's) Sacred Lands File, (3) outreach with local Native American tribes/groups identified by the NAHC to collect any information they may have concerning cultural resources, (4) a pedestrian survey of the project site for historic built-environment and archaeological resources, (5) archival and building development research for buildings located within the project site, (6) evaluation of two properties for National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) eligibility, and (7) consideration of impacts to historical resources in compliance with the California Environmental Quality Act (CEQA).

1.1 Project Personnel

This report was authored by Dudek Architectural Historian Sarah Corder, MFA, who meets the Secretary of the Interior's Professional Qualification Standards for Architectural History. Dudek Archaeologist Erica Nicolay, MA, completed the records search and Native American coordination sections of the report. The entire cultural resources report was reviewed for quality assurance/quality control by Dudek Senior Architectural Historian and Archaeologist Samantha Murray, MA, RPA, who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History and Archaeology.

1.2 Project Location

The proposed project site is located on a portion of a property in the City of Carson that is owned by the County of Los Angeles. The site is northeast of the Dominguez Channel and east of the junction of Interstate 405 (I-) 405 and I-110. The project site is bounded by East Martin Luther King Jr. Street to the north, South Avalon Boulevard to the east, and the remaining portion of the Victoria Golf Course to the south and west (Figure 1).

Northwest of the project site are the County of Los Angeles Cricket Fields, and directly north of the project site and East Martin Luther King Jr. Street are Victoria Park and Towne Avenue Elementary School, which is a Los Angeles Unified School District kindergarten through fifth grade (K–5) school. Northeast of the project site is StubHub Center and the California State University, Dominguez Hills, campus. East of the project site and South Avalon Boulevard is a predominantly single-family residential neighborhood.

Southeast of the project site is a commercial shopping center known as the South Bay Pavilion, and south of the project site is East Del Amo Boulevard and land currently used by Victoria Golf Course. West of the

project site is I-405, land currently used by Victoria Golf Course, an undeveloped swath of land between I-405 and the golf course, and the Goodyear Blimp Airship Base (Figure 2).

The approximately 87-acre site consists of a portion of one parcel (APN 7339-017-917). The street address associated with the project site is 340 Martin Luther King Jr. Street within the City of Carson, California.

1.3 Project Description

The proposed project would consist of the redevelopment of 87 acres in the northeastern portion of the existing 187-acre Victoria Golf Course site for public recreation purposes. The proposed project includes 62 tennis courts, a competition court venue three basic areas; (i) the Learning Center, (ii) the Tennis Center and (ii) the Soccer Center. The Learning Center would be located at the gateway to the Carol Kimmelman Sports and Academic Campus and adjacent to the Tennis Center. The Tennis Center would include 62 tennis courts of varying sizes, a tennis exhibition court, two basketball courts, player development building, tournament building, administration building, maintenance buildings, and other recreational amenities, and associated restroom and storage facilities. The Soccer Center would include eight soccer fields, two multi-use fields, as well as a Welcome Center, Learning Center, Player Development Building, Tournament Building, Soccer Building, Maintenance Building, additional recreational amenities, maintenance buildings and associated restroom and storage facilities.

Learning Center

The Learning Center, which would be operated by the Tiger Woods Foundation, would be located in the most northwestern portion of the project site at the primary gateway to the Carol Kimmelman Sports and Academic Campus. The Learning Center would consist of an approximately 25,000 square-foot building with two basketball courts located adjacent to the building. Access to the Learning Center would be available separate from the Tennis Welcome Center, and tennis center. Parking for the Learning Center would be provided in the Tennis Center parking lot, located directly south of the Learning Center.

Tennis Center

The Tennis Center, which would be operated by United States Tennis Association (or an affiliate), would be located in the northern approximately 29 acres of the overall project site. Access to the Tennis Center would be through the Welcome Center on the west side of the project, adjacent to the Learning Center. Beyond the Welcome Center would be the Competition Venue to the north, with the Tennis Center courts to the south. Within the Competition Venue would be 12 hard courts and approximately 1,200 spectator viewing seats. Located in the center of the Competition Venue area of the project would be a Player Development Building as well as a Tournament/League Administration building. East of the Competition Venue would be training turf and four green clay courts along with a Maintenance Building to house the clay court maintenance equipment and materials.

Located south of the Competition Venue would be a plaza area and training courts for beginners and youth. These training courts would consist of eight 36-foot courts and eight 60-foot courts (of which four would be constructed

in the future). South of the training courts would be the Tennis Center courts area, consisting of 30 full-sized hard surface courts (of which six would be constructed in the future) and an exhibition court.

Soccer Center

The Soccer Center would be located on the southern approximately 58 acres of the project site and accessed via Avalon Boulevard to the east. The Soccer Center would consist of two multi-use fields which could be utilized for rugby, soccer, and other field sports, and eight full sized soccer fields. Five of the fields would have nighttime lighting. A total of 388 vehicle parking spaces would be provided in a surface parking lot east of the soccer fields and west of Avalon Boulevard. Two overflow parking areas would be located north and south of the Soccer Center parking lot. These parking areas would collectively accommodate an additional 565 vehicles.

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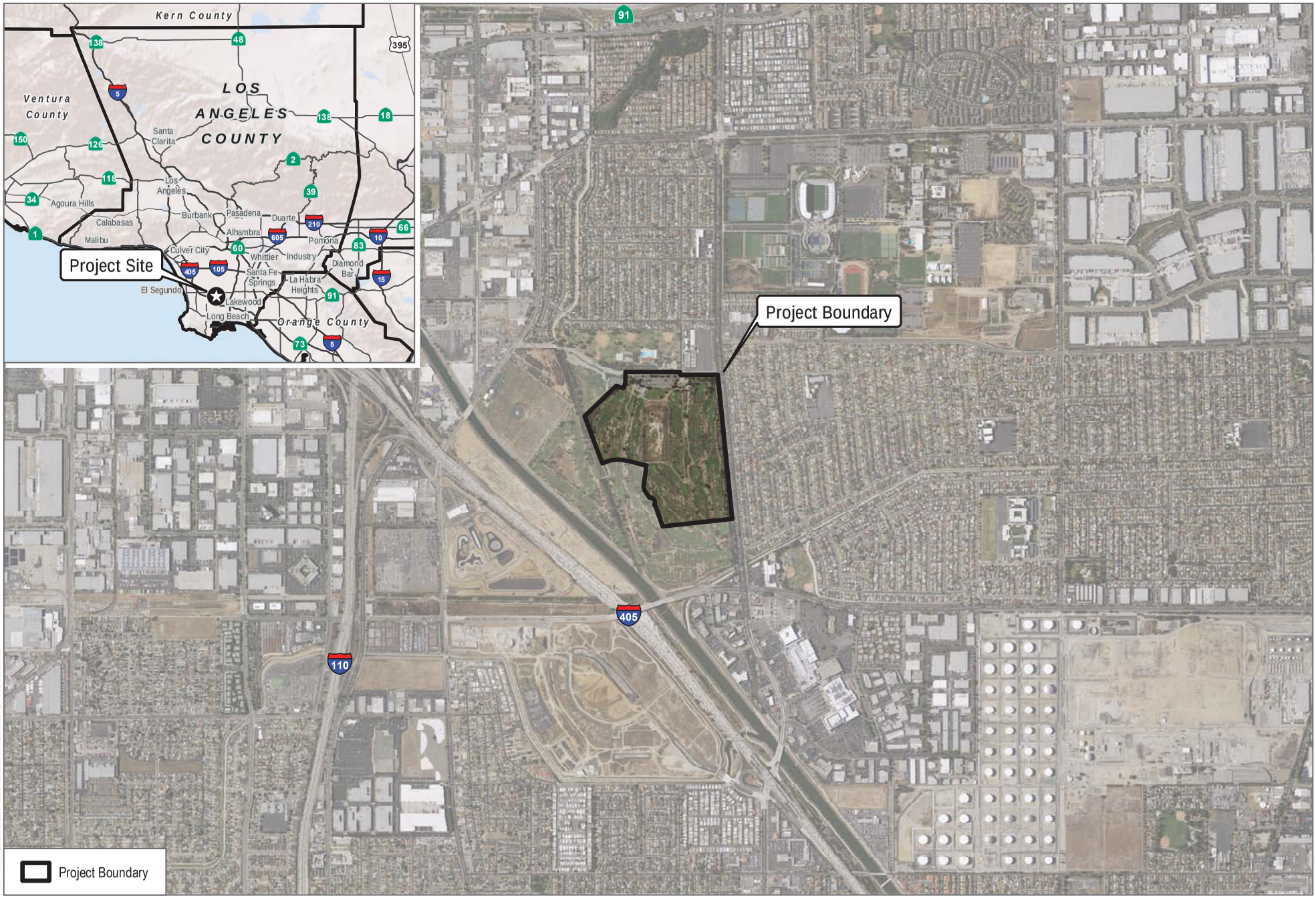

SOURCE: NAIP 2016

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0 250 500 Meters
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FIGURE 1

Project Location

Kimmelman Foundation Sports & Academic Resources Complex Project

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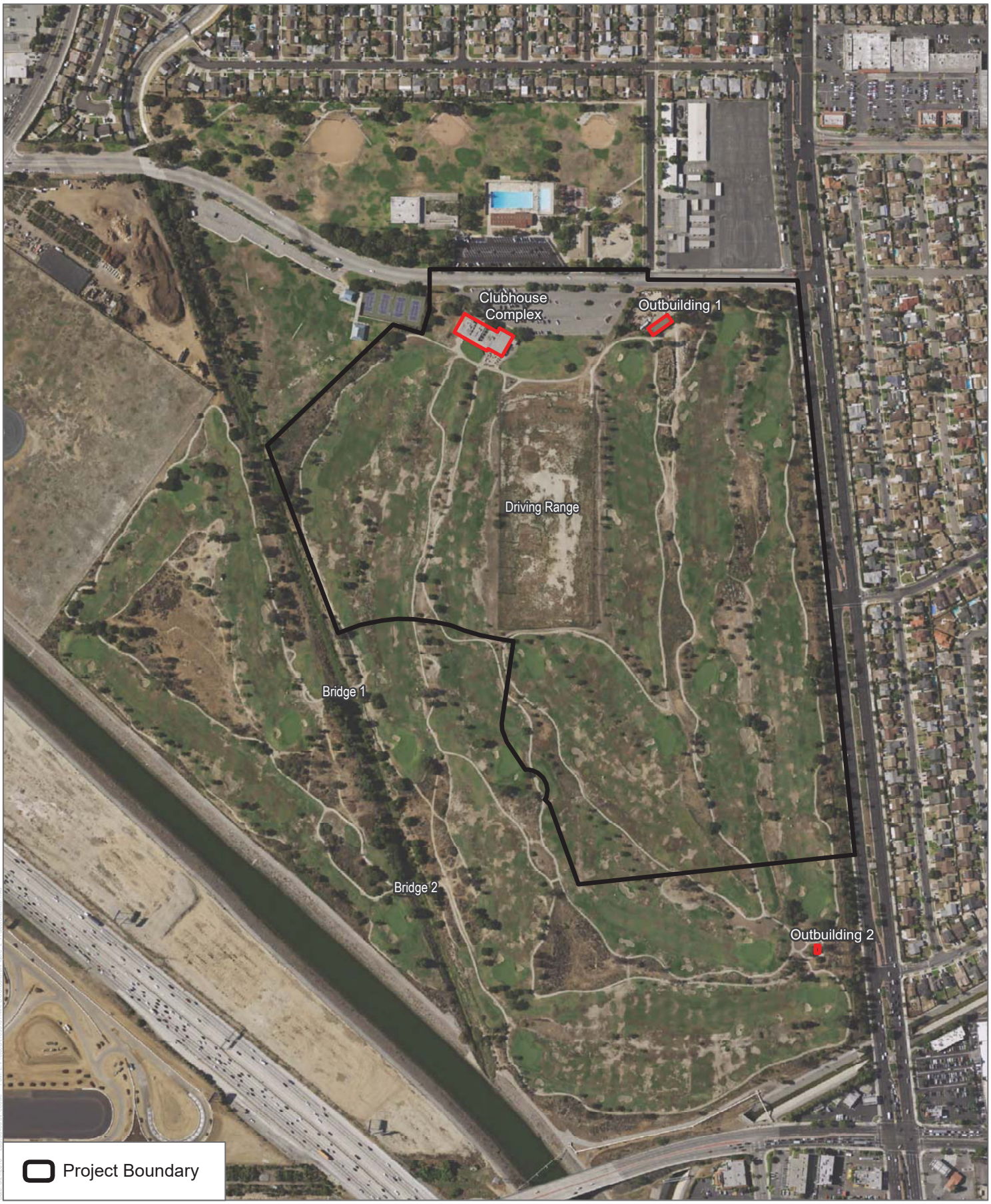

SOURCE: USDA 2016

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0 250 500 Feet

FIGURE 2

Project Site Map

Kimmelman Foundation Sports & Academic Resources Complex Project

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2 REGULATORY SETTING

This section includes a discussion of the applicable laws, ordinances, regulations, and standards governing cultural resources that may be applicable before and during construction of the proposed project.

2.1 Federal

Although there is no federal nexus for this project, the subject property was evaluated in consideration of NRHP designation criteria and integrity requirements.

National Register of Historic Places

The National Register of Historic Places (NRHP) is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks and historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide federal agencies, state and local governments, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. That are associated with the lives of persons significant in our past; or
>
> C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, How to Apply the National Register Criteria for Evaluation, as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1990). NRHP guidance further

asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration G) to be considered for listing.

2.2 State

California Register of Historical Resources

In California, the term "historical resource" includes "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code (PRC), Section 5020.1(j)). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). The criteria for listing resources on the CRHR, enumerated below, were developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated above. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 California Code of Regulations (CCR) 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

The following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

> PRC Section 21083.2(g) defines "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2(g)):
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
>
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
>
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource"; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21073 defines "California Native American tribe."
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) 21083.2(c), and 21084.3(b) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological, historic, and tribal cultural resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5(b)).

A "substantial adverse change in the significance of an historical resource" signifying a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following (14 CCR 15064.5(b)(2)):

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

(2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2(g)):

(1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

(2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); 14 CCR 15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as a tribal cultural resource (PRC Sections 21074(c) and 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the county coroner has examined the remains (Health and Safety Code Section 7050.5(b)). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Health and Safety Code Section 7050.5(c)). The NAHC will notify the "most likely descendant." With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

2.3 Local

Los Angeles County Historic Preservation Ordinance

22.52.3060 - Criteria for Designation of Landmarks and Historic Districts.

A. A structure, site, object, tree, landscape, or natural land feature may be designated as a landmark if it is 50 years of age or older and satisfies one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of the history of the nation, State, County, or community in which it is located;

2. It is associated with the lives of persons who are significant in the history of the nation, State, County, or community in which it is located;

3. It embodies the distinctive characteristics of a type, architectural style, period, or method of construction, or represents the work of an architect, designer, engineer, or builder whose work is of

significance to the nation, State, County, or community in which it is located; or possesses artistic values of significance to the nation, State, County, or community in which it is located;

4. It has yielded, or may be likely to yield, significant and important information regarding the prehistory or history of the nation, State, County, or community in which it is located;

5. It is listed, or has been formally determined eligible by the United States National Park Service for listing, in the National Register of Historic Places, or is listed, or has been formally determined eligible by the State Historical Resources Commission for listing, on the California Register of Historical Resources;

6. If it is a tree, it is one of the largest or oldest trees of the species located in the County; or

7. If it is a tree, landscape, or other natural land feature, it has historical significance due to an association with an historic event, person, site, street, or structure, or because it is a defining or significant outstanding feature of a neighborhood.

B. Property less than 50 years of age may be designated as a landmark if it meets one or more of the criteria set forth in subsection A of this Section, and exhibits exceptional importance.

C. The interior space of a property, or other space held open to the general public, including but not limited to a lobby, may be designated as a landmark or included in the landmark designation of a property if the space qualifies for designation as a landmark under subsections A or B of this Section.

D. Historic districts. A geographic area, including a noncontiguous grouping of related properties, may be designated as an historic district if all of the following requirements are met:

1. More than 50 percent of owners in the proposed district consent to the designation;

2. The proposed district satisfies one or more of the criteria set forth in subsections A.1 through A.5, inclusive, of this Section; and

3. The proposed district exhibits either a concentration of historic, scenic, or sites containing common character-defining features, which contribute to each other and are unified aesthetically by plan, physical development, or architectural quality; or significant geographical patterns, associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of parks or community planning.

(Ord. 2015-0033 § 3, 2015.)

County of Los Angeles 2035 General Plan (2015)

The County 2035 General Plan, adopted in 2015, provides the policy framework for how and where the unincorporated County will grow through the year 2035. The current General Plan was adopted in 2015. The General Plan Conservation and Natural Resources Element provides strategies and policies regarding historic, cultural and paleontological resources. The following goals and policies may be applicable to the proposed project:

C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.

C/NR 14.2: Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.

C/NR 14.3: Support the preservation and rehabilitation of historic buildings.

C/NR 14.4: Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).

C/NR 14.5: Promote public awareness of historic, cultural, and paleontological resources.

C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

City of Carson General Plan (2004)

The City General Plan, updated in 2004, provides a framework for all zoning and land use decisions within the City. There are no specific policies related to cultural resources; however, the General Plan Parks, Recreation and Human Services Element provides strategies for the conservation of facilities and open space with historic and cultural value. This primarily extends to cultural programs and facilities. The project is located on County-owned land and all land use decisions are subject to the County General Plan. However, any off-site improvements would require approval by the City.

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3 CULTURAL CONTEXT

3.1 Prehistoric Overview

Numerous chronological sequences have been devised to aid in understanding cultural changes within Southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the Southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four periods are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's (1955) synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984), this situation has been alleviated by the availability of thousands of radiocarbon dates that have been obtained by Southern California researchers in the last three decades (Byrd and Raab 2007:217). Several revisions have been made to Wallace's (1955) synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994).

Horizon I–Early Man (ca. 10,000–6,000 BC)

When Wallace defined the Horizon I (Early Man) period in the mid-1950s, there was little evidence of human presence on the Southern California coast prior to 6000 BC Archaeological work in the intervening years has identified numerous pre-8000 BC sites, both on the mainland coast and the Channel Islands (e.g., Erlandson 1991; Johnson et al. 2002; Moratto 1984; Rick et al. 2001). The earliest accepted dates for occupation are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area about 10,000 years ago (Erlandson 1991). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego counties contain several sites dating to 9,000 to 10,000 years ago (Byrd and Raab 2007; Macko 1998a; Mason and Peterson 1994; Sawyer and Koerper 2006). Known sites dating to the Early Man period are rare in western Riverside County. One exception is the Elsinore site (CA-RIV-2798-B), which has deposits dating as early as 6630 calibrated BC (Grenda 1997).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas and on Pleistocene lakeshores in eastern San Diego County (see Moratto 1984). Although few Clovis-like or Folsom-like fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), it is generally thought that the emphasis on hunting may have been greater during Horizon I than in later periods. Common elements in many sites from this period, for example, include leaf-shaped bifacial projectile points and knives, stemmed or shouldered projectile points, scrapers, engraving tools, and crescents (Wallace 1978). Subsistence patterns shifted around 6000 BC coincident with the gradual desiccation associated with the onset of the Altithermal climatic regime, a warm and dry period that lasted for about 3,000 years. After 6000 BC, a greater emphasis was placed on plant foods and small animals.

Horizon II–Milling Stone (6000–3000 BC)

The Milling Stone Horizon of Wallace (1955, 1978) and Encinitas Tradition of Warren (1968) (6000–3000 BC) are characterized by subsistence strategies centered on collecting plant foods and small animals. Food procurement activities included hunting small and large terrestrial mammals, sea mammals, and birds; collecting shellfish and other shore species; near-shore fishing with barbs or gorges; the processing of yucca and agave; and the extensive use of seed and plant products (Kowta 1969). The importance of the seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates and slabs) and handstones (manos and mullers). Milling stones occur in large numbers for the first time during this period and are more numerous still near the end of this period. Recent research indicates that Milling Stone Horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007).

Milling Stone Horizon sites are common in the Southern California coastal region between Santa Barbara and San Diego, and at many inland locations, including the Prado Basin in western Riverside County and the Pauma Valley in northeastern San Diego County (e.g., Herring 1968; Langenwalter and Brock 1985; Sawyer and Brock 1999; Sutton 1993; True 1958). Wallace (1955, 1978) and Warren (1968) relied on several key coastal sites to characterize the Milling Stone period and Encinitas Tradition, respectively. These include the Oak Grove Complex in the Santa Barbara region, Little Sycamore in southwestern Ventura County, Topanga Canyon in the Santa Monica Mountains, and La Jolla in San Diego County. The well-known Irvine site (CA-ORA-64) has occupation levels dating between ca. 6000 and 4000 BC (Drover et al. 1983; Macko 1998b).

Stone chopping, scraping, and cutting tools made from locally available raw material are abundant in Milling Stone/Encinitas deposits. Less common are projectile points, which are typically large and leaf-shaped, and bone tools such as awls. Items made from shell, including beads, pendants, and abalone dishes, are generally rare. Evidence of weaving or basketry is present at a few sites. Kowta (1969) attributes the presence of numerous scraper-planes in Milling Stone sites to the preparation of agave or yucca for food or fiber. The mortar and pestle, associated with pounding foods such as acorns, were first used during the Milling Stone Horizon (Wallace 1955, 1978; Warren 1968).

Cogged stones and discoidals are diagnostic Milling Stone period artifacts, and most specimens have been found within sites dating between 4000 and 1000 BC (Moratto 1984). The cogged stone is a groundstone object with gear-like teeth on its perimeter. Discoidals are similar to cogged stones, differing primarily in their lack of edge modification. Discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals are often purposefully buried and are found mainly in sites along the coastal drainages from southern Ventura County southward, with a few specimens inland at Cajon Pass, and heavily in Orange County (Dixon 1968; Moratto 1984). These artifacts are often interpreted as ritual objects (Eberhart 1961; Dixon 1968), although alternative interpretations (such as gaming stones) have also been put forward (e.g., Moriarty and Broms 1971).

Characteristic mortuary practices of the Milling Stone period or Encinitas Tradition include extended and loosely flexed burials, some with red ochre, and few grave goods such as shell beads and milling stones interred beneath cobble or milling stone cairns. "Killed" milling stones, exhibiting holes, may occur in the cairns. Reburials are common in the Los Angeles County area, with north-oriented flexed burials common in Orange and San Diego counties (Wallace 1955, 1978; Warren 1968).

Koerper and Drover (1983) suggest that Milling Stone period sites represent evidence of migratory hunters and gatherers who used marine resources in the winter and inland resources for the remainder of the year. Subsequent research indicates greater sedentism than previously recognized. Evidence of wattle-and-daub structures and walls has been identified at several sites in the San Joaquin Hills and Newport Coast area (Mason et al. 1991, 1992, 1993; Koerper 1995; Strudwick 2005; Sawyer 2006), while numerous early house pits have been discovered on San Clemente Island (Byrd and Raab 2007). This architectural evidence and seasonality studies suggest semi-permanent residential base camps that were relocated seasonally (de Barros 1996; Koerper et al. 2002; Mason et al. 1997) or permanent villages from which a portion of the population left at certain times of the year to exploit available resources (Cottrell and Del Chario 1981).

Horizon III–Intermediate (3000 BC–AD 500)

Following the Milling Stone Horizon, Wallace's Intermediate Horizon and Warren's Campbell Tradition in Santa Barbara, Ventura, and parts of Los Angeles counties, date from approximately 3000 BC to AD 500 and are characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. The Campbell Tradition (Warren 1968) incorporates David B. Rogers' (1929) Hunting Culture and related expressions along the Santa Barbara coast. In the San Diego region, the Encinitas Tradition (Warren 1968) and the La Jolla Culture (Moriarty 1966; Rogers 1939, 1945) persist with little change during this time.

During the Intermediate Horizon and Campbell Tradition, there was a pronounced trend toward greater adaptation to regional or local resources. For example, an increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites along the California coast during this period. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks become part of the tool kit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period. Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms. Koerper and Drover (1983) consider Gypsum Cave and Elko series points, which have a wide distribution in the Great Basin and Mojave deserts between ca. 2000 BC and AD 500, to be diagnostic of this period. Bone tools, including awls, were more numerous than in the preceding period, and the use of asphaltum adhesive was common.

Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment. Hopper mortars and stone bowls, including steatite vessels, appeared in the tool kit at this time as well. This shift appears to correlate with the diversification in subsistence resources. Many archaeologists believe this change in milling stones signals a shift away from the processing and consuming

of hard seed resources to the increasing importance of the acorn (e.g., Glassow et al. 1988; True 1993). It has been argued that mortars and pestles may have been used initially to process roots (e.g., tubers, bulbs, and corms associated with marshland plants), with acorn processing beginning at a later point in prehistory (Glassow 1997) and continuing to European contact.

Characteristic mortuary practices during the Intermediate Horizon and Campbell Tradition included fully flexed burials, placed facedown or faceup, and oriented toward the north or west (Warren 1968). Red ochre was common, and abalone shell dishes were infrequent. Interments sometimes occurred beneath cairns or broken artifacts. Shell, bone, and stone ornaments, including charmstones, were more common than in the preceding Encinitas Tradition. Some later sites include Olivella shell and steatite beads, mortars with flat bases and flaring sides, and a few small points. The broad distribution of steatite from the Channel Islands and obsidian from distant inland regions, among other items, attest to the growth of trade, particularly during the latter part of this period. Recently, Raab and others (Byrd and Raab 2007) have argued that the distribution of Olivella grooved rectangle (OGR) beads marks "a discrete sphere of trade and interaction between the Mojave Desert and the southern Channel Islands."

Horizon IV–Late Prehistoric (AD 500–Historic Contact)

In the Late Prehistoric Horizon (Wallace 1955, 1978), which lasted from the end of the Intermediate (ca. AD 500) until European contact, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points, usually stemless with convex or concave bases, suggests an increased usage of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Other items include steatite cooking vessels and containers, the increased presence of smaller bone and shell circular fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments made from shell, bone, and stone. There is also an increased use of asphalt for waterproofing and as an adhesive.

Many Late Prehistoric sites contain beautiful and complex objects of utility, art, and decoration. Ornaments include drilled whole venus clam (*Chione* spp.) and drilled abalone (*Haliotis* spp.). Steatite effigies become more common, with scallop (*Pecten* spp. and *Argopecten* spp.) shell rattles common in middens. Mortuary customs are elaborate and include cremation and interment with abundant grave goods. By AD 1000, fired clay smoking pipes and ceramic vessels began to appear at some sites (Drover 1971, 1975; Meighan 1954). The scarcity of pottery in coastal and near-coastal sites implies ceramic technology was not well developed in that area, or that ceramics were obtained by trade with neighboring groups to the south and east. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

Another feature typical of Late Prehistoric period occupation is an increase in the frequency of obsidian imported from the Obsidian Butte source in Imperial County, California. Obsidian Butte was exploited after ca. AD 1000 when it was exposed by the receding waters of Holocene Lake Cahuilla (Wilke 1978). A Late Prehistoric period component of the Elsinore site (CA-RIV-2798-A) produced two flakes that originated from Obsidian Butte (Grenda 1997; Towner et al. 1997). Although about 16% of the debitage at the Peppertree site (CA-RIV-463) at Perris Reservoir is obsidian, no sourcing study was done (Wilke 1974). The site contains a late Intermediate to Late Prehistoric period component, and it is assumed that most of the obsidian originated from Obsidian Butte. In the earlier Milling Stone and Intermediate periods, most of the obsidian found at sites within Riverside County came from northern sources, primarily the Coso volcanic field. This appears to be the case within Prado Basin and other interior sites that have yielded obsidian (e.g., Grenda 1995; Taşkiran 1997). The presence of Grimes Canyon (Ventura County) fused shale at Southern California archaeological sites is also thought to be typical of the Late Prehistoric period (Demcak 1981; Hall 1988).

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages (Wallace 1955). Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between AD 500 and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura counties; the Takic or Numic Tradition is present in the Los Angeles, Orange, and western Riverside counties region; and the Yuman Tradition is present in the San Diego region. The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric period are thought to be the result of a migration to the coast of peoples from inland desert regions to the east. In addition to the small triangular and triangular side-notched points similar to those found in the desert regions in the Great Basin and Lower Colorado River, Colorado River pottery and the introduction of cremation in the archaeological record are diagnostic of the Yuman Tradition in the San Diego region. This combination certainly suggests a strong influence from the Colorado Desert region.

In Los Angeles, Orange, and western Riverside counties, similar changes (introduction of cremation, pottery, and small triangular arrow points) are thought to be the result of a Takic migration to the coast from inland desert regions. This Takic or Numic Tradition was formerly referred to as the "Shoshonean wedge" or "Shoshonean intrusion" (Warren 1968). This terminology, used originally to describe a Uto-Aztecan language group, is generally no longer used to avoid confusion with ethnohistoric and modern Shoshonean groups who spoke Numic languages (Heizer 1978; Shipley 1978). Modern Gabrielino/Tongva, Juaneño, and Luiseño in this region are considered the descendants of the prehistoric Uto-Aztecan, Takic-speaking populations that settled along the California coast during this period or perhaps somewhat earlier.

3.2 Ethnographic Overview

The project site is located within the Gabrielino (or Tongva) ethnographic boundary (Kroeber 1925). A brief discussion is presented below.

Gabrielino/Tongva

The archaeological record indicates that the Gabrielino arrived in the Los Angeles Basin around 500 BC Many contemporary Gabrielino identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin and adjacent areas and use the native term Tongva to describe themselves (King 1994). This term is used in the remainder of this section to refer to the pre-contact inhabitants of the Los Angeles Basin and their descendants. Surrounding native groups included the Chumash and Tataviam to the northwest, the Serrano and Cahuilla to the northeast, and the Juaneño and Luiseño to the southeast.

The name "Gabrielino" denotes those people who were administered by the Spanish from the San Gabriel Mission, which included people from the Gabrielino area proper as well as other social groups (Bean and Smith 1978; Kroeber 1925). Therefore, in the post-contact period, the name does not necessarily identify a specific ethnic or tribal group. The names by which Native Americans in Southern California identified themselves have, for the most part, been lost. Many modern Gabrielino identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin and refer to themselves as the Tongva (King 1994). This term is used in the remainder of this section to refer to the pre-Contact inhabitants of the Los Angeles Basin and their descendants.

Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands, San Clemente, San Nicolas, and Santa Catalina. The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000 (Bean and Smith 1978), but recent ethnohistoric work suggests a number approaching 10,000 (O'Neil 2002). Houses constructed by the Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Cleared fields for races and games, such as lacrosse and pole throwing, were created adjacent to Tongva villages (McCawley 1996). Archaeological sites composed of villages with various sized structures have been identified.

The Gabrielino community of Siutcanga is believed to have been located at Rancho El Encino, a 4,461-acre tract of land granted to three ex-mission Indians named Ramón, Francisco, and Roque. When the Portolá expedition passed through the San Fernando Valley in 1769, the explorers stopped at a large freshwater pool located near "a populous Indian village" (McCawley 1996). It is believed that the Spanish explorers stopped in an area near present-day Encino, and historians have suggested that the village observed by the Spaniards was in fact Siutcanga. In the mid-1980s, archaeological investigations in Encino at the intersection of Ventura

and Balboa Boulevards revealed evidence of a large village site (CA-LAN-43) that may have been Siutcanga. The site is situated on an ancient streambed and included a cemetery with both human and animal burials. Radiocarbon testing dated the site to as early as 5,000 BC Most of this site has since been destroyed by development (McCawley 1996).

The Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like that of most native Californians, acorns were the staple food (an established industry by the time of the early Intermediate Period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh water and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978; Kroeber 1925; McCawley 1996).

A wide variety of tools and implements were used by the Tongva to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands (McCawley 1996).

Tongva people processed food with a variety of tools, including hammerstones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels (Blackburn 1963; Kroeber 1925; McCawley 1996).

At the time of Spanish contact, the basis of Tongva religious life was the Chinigchinich cult, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925). The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the Southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices (McCawley 1996).

Deceased Tongva were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966), as well as scattered among broken groundstone implements (Cleland et al. 2007). Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a wide variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased (Johnston 1962;

McCawley 1996; Reid 1926). At the behest of the Spanish missionaries, cremation essentially ceased during the post-contact period (McCawley 1996).

3.3 Historic Context

Post-contact history for the State of California is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American period, when California became a territory of the United States.

Spanish Period (1769–1822)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabrílloo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrílloo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabrílloo and Vizcaíno (Bancroft 1885; Cleland 2005; Gumprecht 2001).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portolá was exploring southern California, Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823, including Mission San Fernando Rey de España (Cleland 2005; Gumprecht 2001; Jorgensen 1982; Kyle 2002; Roderick 2001).

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named "the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula" or "Our Lady the Queen of the Angeles of the Porciúncula." Two

years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Gumprecht 2001; Jorgensen 1982; Kyle 2002).

The expedition camped at a watering place at the base of the San Gabriel Mountains in 1769, and the location was noted in Crespi's diary. The mission was founded in September 1797 by Father Fermín Lasuén and Fray Francisco Dumetz. The mission consisted of a church, fountains, cloisters and extensive agricultural grounds outside the area. The Spanish missionaries impressed the native Tongva, Tatavium, and Chumash tribes into Christianity through baptism and service as neophytes. The land taken by the Spanish was not repatriated to these tribes (Cleland 2005; Roderick 2001).

Mexican Period (1822–1848)

A major emphasis during the Spanish period in California was the construction of missions and associated presidios to convert the Native American population to Christianity and integrated communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish period, only two of which were successful and grew into California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish first concentrated their colonization efforts. One such land grant was made to Juan Jose Dominguez. Dominquez was part of the original Portala expedition and was part of a military unit tasked with protecting Father Junípero Serra, during the establishment of the California Missions. Following his retirement in 1782, Dominguez was awarded Rancho San Pedro for his many years of military service. The Rancho San Pedro was approximately 75,000 acres and encompassed what became the modern cities of Carson, Redondo Beach, Lomita, Wilmington, Torrance, and portions of San Pedro (City of Carson 2016, Jerrils 1972).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary Southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. Dominquez was no exception to this practice, as he moved cattle to his newly acquired land shortly after the grant. Upon arrival with his cattle, he established an adobe for himself, smaller structures for workers, and corrals to run his agricultural operation. However, Dominguez did not spend a great deal of time at the rancho until the last 5 years of his life. During this time, there were cattle and land disputes with the neighboring rancho. Following his death in 1805, Dominquez did not name anyone to take over the rancho so his executor Manuel Gutierrez took control of the rancho by 1809 even though much of the Dominquez estate was left to his nephew

Christobal Dominguez. While Christobal appeared to accept Gutierrez taking control of the rancho, he moved to take possession of the rancho through a petition to the Mexican governor in 1817. The land was eventually granted to Cristobal in 1822, thus, securing it for the next generation of the Dominquez family (City of Carson 2016, Jerrils 1972).

Upon his death in 1825, Christobal's will divided the rancho among his six remaining children evenly. Christobal's son Manuel Dominguez made the rancho his home for more than 50 years. During his time on the property, Manuel constructed a five-room adobe for use by him and his two brothers also residing at the property prior to establishing their own homesteads on the rancho. Manuel spent much of his life in the adobe he built with his wife, Maria Engracia de Cota, whom he married in 1827. In addition to his life on the rancho, Manuel was active in politics for the Pueblo de Los Angeles and held many public offices throughout his life (Jerrils 1972).

In an ongoing effort to preserve his legacy, Manuel battled to keep Rancho San Pedro within the Dominquez family throughout the first half of the nineteenth century. Land claims by the Guitierrez and Sepulveda families and financial troubles experienced by other members of the Dominquez families resulted in a fight for control of the rancho that continued well into the early years of the American period. By 1858, the rancho was listed on the formal patent as 43,119.13 acres, and Manuel owned approximately 26,000 acres of the rancho at the time of the patent (Jerrils 1972).

American Period (1848–Present)

During the multi-year legal battles and financial struggles with Rancho San Pedro, tensions rose between Mexico and the United States. War in 1846 between the two countries precipitated the Battle of Chino, a clash between resident *Californios* and Americans in the San Bernardino area. The Mexican–American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American period (Jerrils 1972).

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the Southern California economy through 1850s. The Gold Rush began in 1848 and, with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the cattle boom of the 1850s, rancho *vaqueros* drove large herds from Southern to Northern California to feed that region's burgeoning mining and commercial boom. The cattle boom ended for Southern California as neighboring states and territories began driving herds to Northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 1941).

Rancho San Pedro was by no means immune to the financial turmoil seen throughout California in the years following the war in 1846. Following the conclusion of the war, the Dominguez family was able to obtain a clear title to Rancho San Pedro with Manuel Dominquez holding a large percentage of the land. According to Jerrils'

The History of a City…Carson, California, Manuel's legacy and the legacy of Rancho San Pedro continued after his passing in 1882 with the following historic firsts on the rancho: "Establishment of a memorial seminary for the training priests of the Claretian Order, the first national air meet in the United States, the discovery of oil, and the beginning of the Dominguez Water Corporation" (Jerrils 1972).

Historical Overview of Carson

Despite his many years of supervising operations at the rancho, Manuel turned his responsibilities over to his son-in-law, George Henry Carson, in 1862. George held a variety of positions throughout his life including, but not limited to, being a successful mercantile store manager and a Los Angeles County public administrator. Following his work as the public administrator, George married Manuel's daughter Maria Victoria Dominguez and made their permanent home to the north of the rancho. George and Victoria had a son, John Manuel Carson, who would carry on the Carson name and legacy throughout the twentieth century. The significant contributions of John Manuel Carson were also recognized in the eventual naming of the City of Carson following its incorporation in 1968 (City of Carson 2016, Jerrils 1972, Tino-Sandoval 2006).

The late nineteenth and early twentieth centuries were a period of growth and development in and around Carson. Much of the development of the area was made possible by the sale of portions of the Rancho San Pedro owned by Dominguez family descendants under the Dominguez Estate Company. One of the earliest subdivisions was the Nestoria subdivision. Many of the subdivided portions of the original rancho were used for smaller family farms (Tino-Sandoval 2006).

The Dominguez Estate Company maintained some of their properties at this time due to use of the land for oil operations, which was a large component of the Dominguez heir's wealth and the economic system in Carson during the twentieth century. For instance, in 1945 Dominguez Hill had an oil development site with over 350 oil wells that spanned over 1,200 acres. Large oil companies also made the Carson area their home, such as the Shell Oil Company that began construction of their site in 1927 near Dominguez Hill (Tino-Sandoval 2006).

The 1920s was also a period of industrial growth with the establishment of companies such as the Kellogg Garden Products plant in 1925. Hiram Clay Kellogg Sr. brokered a lease agreement for his company with the Los Angeles County Sanitation District for establishment of his Carson plant. The plant created jobs for the area, was an important early step towards the industrialization of the City, and remains in Southern California today (Tino-Sandoval 2006).

Although the population of Carson remained small and the area remained largely agricultural, other services emerged in the early twentieth century such as local schools and public water service provided by the Dominquez Water Corporation. These services provided vital amenities for the residents and helped facilitate the growth and development of the area. While there were early steps taken towards industrialization and oil production, the bulk of commercial and industrial developments were slow to come to Carson until after the Great Depression. In the years following the Great Depression, most of Southern California experienced a housing boom, and Carson was

no exception. During the post-Depression years, the area saw expanded amenities and services for its residents, as well as a large increase in housing options (Tino-Sandoval 2006).

Carson also continued to increase in population brought about by the construction of the 110 Freeway. During the 1950s and 1960s, the 110 Freeway was under construction; it was completed in 1970. During this time, portions of land in Carson were acquired from private citizens for the construction of ramps and associated freeway infrastructure. Today the freeway serves as a vital transportation corridor through the greater Los Angeles area (Tino-Sandoval 2006).

While the population, industry, and commercialism increased in the area in the 1950s and 1960s, it remained part of unincorporated Los Angeles County. Throughout most of the twentieth century, Carson became a popular garbage repository for established cities throughout the area. Without a local government to control use patterns within the area, Carson struggled to move forward. However, in 1968 the residents of Carson took a stand and incorporated on February 20, 1968. Approximately 10,000 of the 17,000 registered voters in Carson cast a vote, and the results were 6,301 in favor of incorporation to 3,834 opposed to incorporation. Shortly thereafter, the city was named Carson, and its first mayor and City Council members were put in place. The newly appointed City representatives were quick to target the unwanted industries in the City, and steps were taken to remove or revise their appearance and practices. Such steps included strict building and landscaping codes, as well as removal of some of the unwanted entities. The City continued its efforts with beautification projects over the years resulting in public parks, landscaped medians, and street lighting projects (CDN 1968, City of Carson 1969, City of Carson 2016, Tino-Sandoval 2006).

While Carson was one of the later parts of Los Angeles County to become incorporated, the City continued to grow and develop following the incorporation in 1968 and played host to a portion of the Olympic Games in 1984. The following information from the City of Carson website illustrates the role played by Carson in the 1984 games:

> For the Olympic races, a special arena had to be built. The chosen site was the campus of California State University at Dominguez Hills, in Carson. American Olympic athletes won over 15 medals while competing in cycling events at the 1984 Olympics at the Carson Velodrome. The Velodrome, as such stadiums were known, was built to seat more than 5,000 spectators; the special track was custom-made for high-speed cycling. A new generation of cyclists has used the same facility as a training ground for later Olympics triumphs, including World Champion racers Marty Nothstein, and Paraskavin-Young. Today, what was once known as Carson Velodrome is now called the VELO Sports Center on the 125-acre StubHub Center (City of Carson 2016).

Carson continued to grow and develop throughout the remaining decades of the twentieth century and today. Such examples of this civic growth can be seen throughout the City with the construction of the Carson Civic Center, the Carson Community Center and the Stub Hub Center. The City has also worked through extensive environmental hurdles to revitalize once contaminated industrial sites for new uses such as the Carson Town

Center that opened its doors in 1996 on a site that was once the Golden Eagle refinery. As of 2010, the City supports a diverse population of 91,714 (City of Carson 2016).

Project Site Historic Context

The subject property was originally one of the many land holdings of the Dominquez family and was under the ownership of the Dominquez Estate Company for many years prior to its development. According to historic aerial photographs and archival research, the subject property appears undeveloped during the first half of the twentieth century. However, the development of the property began to shift starting in the late 1940s and early 1950s. During these years, the Dominguez Estate Company entered into multiple lease agreements for the property. The first lease agreement was for the Bak Disposal Company for a period of 10 years starting on July 21, 1948. The second lease agreement was for the Rancho Angeles Trap and Skeet Club for a period of 5 years starting on July 7, 1955 (Will 1957).

In 1948, the Dominquez Estate Company entered into a lease agreement with Ben K. Kazarian, who operated the BKK Landfill on the property from 1948-1959. The landfill was permitted to accept the following items: household refuse, commercial refuse, solid fill materials, garbage in the form of animal or vegetable products, liquids, and semi-liquids. A review of historic aerial photographs failed to indicate any further details about the landfill (CalEPA 2006; NETR 2018).

In 1955, the Rancho Angeles Trap and Skeet Club entered into a lease with the Dominquez Estate Company for use of the property for a Trap Club. Based on aerial photographs of the area, the club was located to the west of the storm channel and contained at least nine shooting ranges, which were likely for both skeet and trap shooting (See Figure 3). An article from the Los Angeles Times (LAT) from 1963 discussed the relocation of the trap club and the fact that it was taking up approximately 36 acres of the site that was proposed for the development of a municipal golf course. According to the article, the County of Los Angeles Department of Parks and Recreation (LACDPR) was planning to help the trap club relocate to somewhere in the vicinity of the new golf course. While no further archival information was found on the relocation of the trap club, historic aerial photographs from 1967 show that the trap club is no longer on the site (LAT 1963; NETR 2018).



Figure 3. Los Angeles Trap and Skeet Club, 1956 (CSUDH 1956)

The decision to create a golf course in Carson went on for many years and involved many steps from the County of Los Angeles. The plan for acquiring and developing a large site for a golf course, as was the case with the Victoria County Golf Course, was popular at the time and part of a long tradition in the County Department of Parks and Recreation. Starting with the construction of Santa Anita Golf Course in 1938, the County has a rich history of municipal golf course development. According to an article in the LAT from 1967, County Parks and Recreation Director Norman Johnson stated the following:

> County golf courses serve two purposes: The facilities provide recreation for more than 1 million people who participate on county facilities annually, and the areas reserved for this purpose present large areas of open space from being swallowed by industrial and residential subdivisions (LAT 1967a).

While the early years of the golf course system were met with financial challenges, County Supervisor Kenneth Hahn brought about a new pay-as-you-go process for the acquisition of golf courses in Los Angeles. The

following excerpt from an LAT article from 1967 outlines the interworkings of the new system of golf course acquisition starting in 1954:

> Under this system the Los Angeles County Employees Retirement Assn. holds the title to a new golfing facility and leases the facility to Los Angeles County for a maximum of 30 years.
>
> The Board of Supervisors turn over the course for operational purposes to the County Parks and Recreation Department. The department collects greens fees and other revenues, which are then used to buy the new facility from LACERA (LAT 1967a).

The first course under this new system was the Western Avenue Golf Course, which was able to be purchased by the County from the Los Angeles County Employees Retirement Association in only 8 years, instead of the 30 years allowed for payment (LAT 1967a).

By 1967, all of the County golf course purchases were made using this system including the Victoria County Golf Course site. These innovative acquisition measures helped the County to acquire numerous properties in the second half of the twentieth century resulting in the current state of the LACDPR. Currently the LACDPR operates the largest public golf course system in the United States with a total of 20 golf courses, including the following:

> Of the 20 golf courses, 13 are 18-hole regulation length courses, three are convenient 9-hole regulation length courses, one is a challenging 18-hole executive length course, one is an 18-hole par-three course, and two are 9-hole par-three courses (LACDPR 2018).

Much like other courses at the time, the Victoria County Golf Course site was purchased using this new County system and, at the time of its opening, was one of 14 courses in the County golf system (LAT 1967b). However, it would be a long road between the initial request to the property owner, Dominguez Estate Company, and the actual sale and development of the property as a municipal golf course. Starting in 1956, the County Board of Supervisors made an attempt to purchase the approximately 200-acre tract of land containing the subject property from the Dominguez Estate Company based on recommendations from the County of Los Angeles Parks and Recreation Commission for the development of a golf course and recreation area. However, the Dominguez Estate Company refused to sell the property at that time. The idea of a lease arrangement between the County and the Dominguez Estate Company was initially discussed in 1956, but ultimately no agreement could be reached. However, in February of 1957 the Dominguez Estate Company offered to sell the property to the County (Will 1957).

On May 28, 1957, the County Board of Supervisors approved the purchase of a 204-acre parcel from the Dominguez Estate Company (Lins 1957). However, this approval was rescinded in early June of 1957 due to discrepancies in the appraisal figures. According to Supervisor Hahn, the discrepancy in the appraisal figures ($808,000 and $1,300,000) was too great, and the approval to purchase the property needed to be rescinded (LBPT 1957a). By the end of June 1957, a public hearing was called for the proposed land

purchase. Amidst opposition from Supervisor Hahn, the hearing was pushed to August 1957 (LBPT 1957b). On August 8, 1957, despite opposition from supervisor Kenneth Hahn regarding incorrect information provided to the County during the appraisal process, the Board of Supervisors voted 4 to 1 purchase the approximately 200-acre tract of land from the Dominguez Estate Company for a cost of $1,300,000 on August 8, 1957 (LAT 1957). However, the County's purchase continued to be criticized throughout the late 1950s. One example of such criticism was seen in an article in the *Los Angeles Examiner* in December 1959, which stated that there were questionable methods used during the acquisition and cites Supervisor Hahn's opposition to the approval for purchase (LAE 1959). Regardless, the project moved forward, and leveling and covering operations for the conversion of the landfill site to a golf course began on January 8, 1960 (LAE 1960).

Plans for developing the site continued throughout the first half of the 1960s. As discussed previously, the relocation of the trap club in 1963 was one of many steps in preparing the site for its eventual use as a golf course (LAT 1963). By 1964, the Board of Supervisors approved plans to develop the site as a golf course (IST 1964_Jan 26). In 1965, a contract for the construction of an 18-hole golf course and clubhouse was awarded at a planned cost of $1,150,734 (LAT 1965). Running parallel to these developments at the golf course site, was the city incorporation movement in Carson. However, it was decided early on in the incorporation discussions that the County would retain ownership of the golf course site regardless of the outcome of the City incorporation (LAT 1967c).

Construction continued throughout 1966 and into the spring of 1967. Despite the fact that the course was dedicated on October 10, 1966, it was not officially opened to the public until spring of 1967 (LAT 1967b, LAT 1967d; Sandoval 2006). By April 13, 1967, the Victoria County Golf Course opened to the public with over 300 golfers sampling the course. The opening of the course was described as follows (LAT 1967b, LAT 1967e):

> …Large, undulating greens of the new course and a prevailing southwesterly wind will take a toll on your score. Danger also lurks in the 57 yawning sand traps, which dot the fairways and guard the greens. And also in a flood control channel which parallels two of the holes. We feel sure golfers will find this an interesting course," said Jim Amman, supervisor of the 6,670-layout. "We believe it's the finest of the county's 14 courses." "We are particularly proud of the greens," he said. "We feel they compare with any in the nation. They are extremely large…much larger than the average. The green at the eight hole for instance, is so large a 100 foot putt is possible."…Cost of the project, course and clubhouse, was more than $900,000. "Low as well as high handicap golfers will find the course will offer a series of challenges. And they start with the 505-yard, par five first hole which Amman described as one of the most difficult at the course." "It's a good, honest par five hole," he said. "It's slightly uphill, faces into the wind and thus will play longer than 505 yards. Even a good player will find it difficult to reach the green in two. Bunkers on either side of the fairway will catch hooks and slices and the green is guarded by two traps." "Another interesting hole is the par three, 160-yard 14th

> hole, according to Amman. "At this hole the golfer must hit a tee shot across a flood channel," he said. "The channel is out of bounds. The hole calls for an exacting shot as the wind will push the ball back toward the channel. The green is very close to the channel." He described the par four. 435 yard, 18th hole as a "hooker's nightmare." "I believe this is the toughest hole on the course." He said. "Again the tee shot must clear the flood control channel. The fairway parallels the channel for about 200 yards and thus becomes a hazard for golfers who are inclined to hook their drives." The course has a driving range with 35 positions, two large practice putting greens and a spacious parking area. In the clubhouse is a pro shop, luncheon facilities and locker rooms for men and women. Assisting Amman will be starters Ed Leach, Len King and Ralph Gauthier. Art Osborn is greenskeeper. Operating the pro shop and concessions will be Harvey Chapman, member of the PGA and Gardena councilman, Oscar Widmer will serve as head teaching pro with Bill Wright, former U.S. Public Links Champion assisting. It was Supervisor Kenneth Hahn who conceived the plan of financing the construction of the county's golf courses with retirement board funds in 1954. The board, he explained, will own the course until green fees and other revenues pay off the construction cost. The course is located on a 177-acre site in an area bounded by 102nd St., Avalon Blvd, San Diego Freeway and Main St. Street address of the clubhouse is 340 E. 192nd Street. It is accessible from Avalon Blvd (LAT 1967b).

While building permits were not available for the original construction and subsequent alterations to the buildings associated with the golf course, as-built drawings and historical photographs during and shortly after construction were identified through archival research. According to architectural drawings for the clubhouse, it was designed by architect Edwin H. Ripperdan of Long Beach, California and the landscaping elements for the building were designed by landscape architect Edward R. Lowell of Long Beach, California. No additional information was found on either architect throughout the course of archival research. The following series of photographs show the golf course site during construction in 1966 or shortly after construction in 1967 (See Figures 4–8).



Figure 4. Aerial of Golf Course During First Year of Operation, c. 1967 (COLAPL 1967)



Figure 5. Clubhouse Façade (Northeast Elevation), 1966 (COLAPL 1966a)



Figure 6. Clubhouse Façade (Northeast Elevation), 1966 (COLAPL 1966b)



Figure 7. Rear (Southwest) Elevation of the Clubhouse Under Construction, 1966 (COLAPL 1966c)



Figure 8. Rear (Southwest) Elevation of the Clubhouse and Original Pathway, 1966 (COLAPL 1966d)

Alterations to the Site

Alterations to the site began in 1968 and continued until the early 2000s. The first known alterations to the course include a renovation and reseeding of the front nine holes of the course in 1968 (LAT 1968). These renovations were followed by mechanical upgrades to the water pump system and the construction of additional paths on the course in 1971 (LAT 1971). By 1975, the course was experiencing major drainage problems and a rebuild and repair was completed on the 9th, 15th, and 16th fairways (LAT 1975). No additional alterations were found through archival research until the late 1990s and early 2000s.

Over the next couple of decades, the course declined, and there were numerous issues with ground subsistence, which was due in large part due to the course's placement atop a former landfill site (County Digest 2001). By 1997, a public notice was issued for the Preparation of a Focused Environmental Impact Report for the project site. According to the notice, the proposed work would include new irrigation systems and renovation of the golf course (LAT 1997). By the late 1990s, the course was closed for renovations and

did not reopen again until the spring of 2001. The redesign is attributed to Casy O'Callaghan in 1999 according to information provided on site. The following account from the grand reopening gala details the changes that were made to the site during the $6.8 million renovation:

> Some 240,000 cubic yards of soil was used to fill in the subsided area, and to regrade and elevate most of the course an average of two to three feet. Renovation also included planting 500 trees throughout the course, installation of new irrigation system, new drainage, and improved tees, greens and sand bunkers (County Digest 2001).

Following the renovation of the course, the LAT quoted the president of the Public Links Golf Association, Craig Kessler, as saying, "It's a totally different course now" (LAT 2001). The renovations in the late 1990s revived the course, and it has been in continuous use since the post-renovation reopening in the spring of 2001. Today the golf course is an 18-hole regulation golf course with Bermuda grass greens and fairways, a driving range, and a practice area that includes a sand bunker, chipping area, and multitiered putting green. The course has 6,847 yards of golf for a par 72 (Golf Advisor 2018; Golf Now 2018; The Links at Victoria 2018).

William F. Bell (aka Billy Bell Jr.), Golf Course Architect

The Bell family's golf course history in California began with William P. Bell (aka Billy Bell) (1886-1953). He played a key role in the development of golf course design and the golf movement in the United States. Billy Bell began his golf course career in a variety of lower level positions at golf courses and eventually transitioned into course maintenance and remodeling under the supervision of noted golf course architect William "Willie" Watson. After working under Watson for a few years, Billy Bell began to follow the path of becoming a golf course designer. Bell achieved a reputation as a golf course designer through numerous strategic partnerships throughout the years. For starters, Bell worked with well-known golf course designer George C. Thomas and provided illustrations for his book *Golf Architecture in America: Its Strategy and Construction.* Billy Bell and Thomas collaborated on numerous premiere golf course projects over the years, including Pasadena Golf Course, Griffith Park Golf Course, La Cumbre Golf Course, Los Angeles Country Club North Course, Bel-Air Golf Course, Riviera Golf Course, and the Ojai Valley Inn Golf Course. Following his time with Thomas, Bell went out on his own and designed notable golf courses including, Stanford University Golf Course, Tijuana Country Club Golf Course, Palos Verdes Golf Course, Woodland Hills Golf Course, Brookside Golf Course, and San Diego Country Club Golf Course. However, the Great Depression and flooding throughout Southern California in 1938 left Bell in a different position and he took up with another partner, A.W. Tillinghast, to rebuild damaged courses in Southern California until World War II broke out. Following the war, Billy Bell established his own design firm and focused mainly on course remodeling and redesign. In addition to his work as a designer, Billy Bell was also one of the founding members of the American Society of Golf Course Architects (ASGCA) (City of San Diego 2018; Michelson 2015a, 2015b; Richardson n.d.; SCGA 2017).

Following the close of World War II, Billy Bell's son, William F. Bell (aka Billy Bell Jr.) (1918-1984) began working at his father's firm (ASGCA 2018; City of San Diego 2018; Richardson n.d.). Billy Bell Jr. was born

in Southern California and educated at the University of California. Following World War II, Billy Bell Jr. established himself in Southern California by joining his father's architecture firm, marrying Dell Applebury, and having a child he named after his father (Michelson 2015b). In the early part of his career he collaborated with his father on numerous golf courses including, but not limited to, the following (Michelson 2015c): Tamarisk Golf Course (1953), Tucson Golf Course (1949), Bakersfield Golf Course (1949), Buena Ventura Golf Course (1932), and Newport Beach Golf Course (1954). Following the death of his father in 1953, Billy Bell Jr. took over his father's firm and ran the firm under the name of William P. Bell and Son in honor of his father. Working from his father's plan and original vision, Billy Bell Jr. took over the Torrey Pines Golf Course project and brought it to completion in 1957 (ASGCA 2018; City of San Diego 2018; Michelson 2015a, 2015c; SCGA 2017).

Despite the impressive experience he gained working for his father's firm, Billy Bell Jr. went on to become a prolific designer in his own right. While he is best known for his work on the Torrey Pines North and South Golf Courses (1957), Sandpiper Golf Course (1972), Kona Country Club Golf Course (1966), Idaho Falls Country Club Golf Course (1970), Makaha Golf Club (1969), Industry Hills Golf Course (1979), and Bermuda Dunes Golf Course (1960), he designed many courses over the years, including courses in Arizona, Idaho, Nevada, Oregon, Hawaii, and Utah. His courses included public, private, and military courses, and the bulk of his work was in California between the 1950s and 1970s. The following is an abbreviated list of the golf courses he designed in California (AHGC 2018; ASGCA 2018; City of San Diego 2018; Greenskeeper 2011; Richardson n.d.; SCGA 2017; William Bell Society 2016).

- Bakersfield Country Club (1949)
- Apple Valley Country Club (1951)
- Kern River Golf Course (1953)
- North Ridge Country Club (1954)
- Alhambra Municipal Golf Course (1955)
- Modesto Dryden Park Golf Course (1955)
- China Lake Golf Course (1956)
- Knollwood Golf Course (1956)
- Palo Alto Municipal Golf Course (1956)
- Alisal Ranch Golf Course (1956)
- Antelope Valley Country Club (1957)
- Calimesa Country Club (1958)
- Crystalaire Country Club (1958)
- Lake/Valley at Los Coyotes Country Club (1958)
- Eaton Canyon Golf Course (1959)

- Mesa Verde Country Club (1959)
- Skylinks Golf Course (1959)
- Tahquitz Creek Golf Resort Legend Course (1959)
- Jurupa Hills Country Club (1960)
- Kern Valley Golf Course (1960)
- Whittier Narrows Golf Course (1960)
- Fullerton Golf Course (1961)
- Valley Hi Country Club (1961)
- Heartwell Golf Course (1962)
- Canyon South Golf Course (1962)
- Lake Tahoe Golf Course (1962)
- Palm Desert Country Club (1962)
- Rancho Bernardo Inn (1962)
- Lake Arrowhead Country Club (1963)
- San Luis Rey Downs Golf & Country Club (1963)
- Carmel Highland Resort (1964)
- Diamond Bar Golf Course (1964)
- Olivas Links Golf Course (1964)
- Rancho San Joaquin Golf Course (1964)
- Saticoy Country Club (1964)
- Ancil Hoffman Golf Course (1965)
- Hidden Valley Lake Golf Course (1965)
- Los Verdes Golf Course (1965)
- Muroc Lake Golf Course (1967)
- Lomas Santa Fe Country Club (1968)
- Los Lagos at Costa Mesa Golf & Country Club (1968)
- Mesa Linda at Costa Mesa Golf & Country Club (1968)
- Pine Mountain Lake Country Club (1969)
- Blythe Municipal Golf Course (1969)
- Lake Wildwood Golf Course (1971)
- Bonita Golf Club (1980)
- Malibu Country Club (1980)

- Rancho Duarte Golf Club (1982)

In addition to his project work, Billy Bell Jr. also followed in his father's footsteps with his involvement in and leadership roles with the ASGCA. Billy Bell Jr. became a member of ASGCA in 1950 and from 1957-1958 he held the role as ASGCA president. In addition to his role as organization president, Billy Bell Jr. also served as secretary and treasurer, and was a member of the organization until his death in 1984 (ASGCA 2018; RI 1959; Richardson n.d.).

4 BACKGROUND RESEARCH

4.1 CHRIS Records Search

On February 28, 2018, Dudek completed a search of the CHRIS at the SCCIC for the project site and surrounding 0.5 mile. This search included mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation (DPR) site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the project site, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. The confidential records search results are also provide in Appendix A.

Previously Conducted Cultural Resource Studies

The SCCIC records indicate that 13 previous cultural resources technical investigations have been conducted within 0.5 miles of the project site between 1977 and 2013. None of these previously conducted studies overlap the project site. Table 1 provides a summary of all 13 technical investigations.

Table 1. Previously Technical Studies Within 0.5 Miles of the Project Site

Report Number	Author	Year	Report Title	Proximity to Project Site
LA-00679	Weil, Edward B.	1980	Cultural Resource Evaluation of Proposed Improvements of 190th Street Carson, California.	Outside
LA-01016	Schroth, Adella	1981	Archaeological Resources Assessment of Replacement Bus Operations and Maintenance Facility for Division 18 in the City of Carson, California	Outside
LA-03204	Wlodarski, Robert J.	1995	The Results of a Phase 1 Archaeological Study for the Proposed Del Amo Boulevard Extension Project, City of Carson, Los Angeles County, California	Outside
LA-03583	Bucknam, Bonnie M.	1974	The Los Angeles Basin and Vicinity: a Gazetteer and Compilation of Archaeological Site Information	Outside
LA-03809	Anonymous	1979	Historic Property Survey, Del Amo Blvd.-Figueroa St. to Avalon Blvd.	Outside
LA-04512	Eggers, A.V.	1977	Cultural Resources Inventory of the City of Carson, California	Outside
LA-06194	White, Laura S.	2002	Records Search Results for the Carson Town Center Project Eda Grant, City of Carson, Los Angeles County, California	Outside
LA-06200	McKenna, Jeanette A.	2002	Cultural Resource Assessment/evaluation for Nextel Communications Site CA-7805-a, Carson, Los Angeles County, California	Outside

Table 1. Previously Technical Studies Within 0.5 Miles of the Project Site

Report Number	Author	Year	Report Title	Proximity to Project Site
LA-09132	Bonner, Wayne H.	2000	Archaeological Survey California State University Dominguez Hills, City of Carson, Los Angeles County California	Outside
LA-10567	Hogan, Michael, Bai "Tom" Tang, Josh Smallwood, Laura Hensley Shaker, and Casey Tibbitt	2005	Identification and Evaluation of Historic Properties - West Basin Municipal Water District Harbor- South Bay Water Recycling Project Proposed Project Laterals	Outside
LA-11150	Maxwell, Pamela	2003	West Basin Municipal Water District Harbor/ South Bay Water Recycling Project	Outside
LA-11482	Racer, F.H.	n.d.	Camp Sites in Harbor District	Outside
LA-12440	Bonner, Wayne	2013	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0573 (NOLA Substation) 125 Griffith Street, Carson, Los Angeles County, California	Outside

Previously Recorded Cultural Resources

No cultural resources have been previously recorded within the project site. However, the SCCIC records indicate that two resources have been previously recorded within 0.5 miles of the project site (Table 2). One of the resources is a prehistoric site that was recorded in 1939 and updated in 1951. Since then, extensive development has likely destroyed any remnants of this resource. The second resource is the 7-Eleven Olympic Velodrome, which is now known as the VELO Sports Center. According to the site records for this resource, the VELO Sports Center was demolished and replaced with the StubHub Center, a multiple-use sports complex.

Table 2. Previously Recorded Cultural Resources Within 0.5 Miles of the Project Site

Primary Number	Trinomial	Period	NRHP/CRHP Status	Description	Recorded By/Year
P-19-000088	CA-LAN-88	Prehistoric	Recommended Eligible for the CRHR	Miscellaneous small prehistoric sites around border of Lagunas de Los Dominguez-area has been heavily developed since recordation.	Racer, F.H. (1939); Rozaire (1951)
P-19-188476	—	Historic	Not evaluated	7-Eleven Olympic Velodrome has since been demolished, in location where StubHub center is now located.	Fafarman, Lawrence (2000)

Notes: NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.

4.2 Native American Coordination

Sacred Lands File Search and Tribal Outreach

On March 7, 2018, Dudek requested a search of the Sacred Lands Files from the California (NAHC). NAHC responded via email on March 8, 2018, stating that the results of the Sacred Lands File did not identify the presence of Native American cultural resources in the immediate project vicinity. The NAHC also provided a list of five Native American groups and individuals who may have knowledge of cultural resources in the project area. Letters were sent to these representatives on March 28, 2018.

To date, one response has been received from a representative of the Gabrielino Band of Mission Indians-Kizh Nation, stating that the project site may have potential for discoveries of cultural resources and recommending that a Native American monitor from their tribe be present for all ground disturbance. Should additional responses be received, they will be forwarded to the County. Documentation of coordination with Native American groups and individuals is provided in Appendix B.

4.3 Archival Research

Archival research for the project site involved extensive primary and secondary source review, review of historic maps, review of historic photographs, and in-person visits for building information as stated below. All archival research was conducted by Dudek Architectural Historian Sarah Corder, MFA, and Dudek Archaeologist Erica Nicolay, MA.

Los Angeles County Tax Assessor's Office

The Los Angeles County Assessor Online Portal was used to determine dates of construction and square footage counts for the subject property.

City of Carson Public Library

Dudek visited the City of Carson Public Library on March 29, 2018. The library provided access to numerous environmental impact reports for the City of Carson, published sources on the City of Carson, and four file boxes containing a variety of documents pertaining to the history of the City of Carson. The information obtained from the library was used in the preparation of the historic context.

California State University Dominguez Hills Archives and Special Collections

Dudek visited the California State University Dominquez Hills Archives and Special Collections on March 29, 2018. The collection includes numerous aerial photographs of various parts of Carson, multiple files pertaining the history of the golf course, and several published works pertaining to the history of Carson. All materials were reviewed, and any relevant materials were used in the preparation of the historic context.

Golf Historical Society

Dudek contacted John Jones from the Golf Historical Society on April 30, 2018, and requested any information pertaining to the project site and background information pertaining to the development of municipal and private golf courses in Southern California. All information provided by the Golf Historical Society was used in the preparation of the historic context.

Architectural Drawings

Dudek was provided a copy of the original as-built drawings of the golf course clubhouse on April 11, 2018. Information obtained from these drawings was used in the preparation of the historic context.

Review of Historic Aerial Photographs and Maps

In order to understand development of the project site and surrounding properties, Dudek consulted historic maps and aerial photographs accessible online from Nationwide Environmental Title Research's (NETR) historic aerial viewer, as well as the UCSB Map and Imagery Library. Topographic maps are available for the following years: 1896, 1899, 1905, 1910, 1916, 1922, 1924, 1926, 1927, 1930, 1939, 1953, 1959, 1966, 1975, 1982, and 2012 (NETR 2018). Aerial images are available for the following years: 1937, 1938, 1952, 1956, 1963, 1965, 1967, 1968, 1972, 1976, 1979, 1980, 1994, 2002, 2003, 2004, 2005, 2007, 2009, 2010, 2012, and 2014 (AMI 1967, 1979; FAS 1937a, 1937b, 1938, 1956, 1965; NETR 2018; Skyview Aerial 2007; Teledyne Geotronics 1968, 1976).

The first U.S. Geological Survey topographic map from 1896 showing the project site indicates that in the late nineteenth and early twentieth centuries the project site was located near a natural lake and wetland area. Between 1927 and 1930, the lake was channelized and is now known as Dominguez Channel, which runs northwest–southeast along the southwestern corner of the project site. The first historic aerials depicting the project site are from 1952 and show the project site as agricultural fields. At this time South Avalon Boulevard, which borders the project site on the east, and South Main Street, to the west of the project site, are present and appear to be paved. The Dominguez Channel, which runs along the southwest corner of the project site, is seen in this aerial and appears to have been recently channelized. An offshoot of the Dominguez Channel, known as the Dominguez Branch Channel, is also seen intersecting the project site. The area to the west of the project site appears to be completely graded. At this time, much of the surrounding area is undeveloped and appears to be agricultural land. The residential subdivision to the north of the project site is seen on this first aerial and appears to be in the process of construction. During this time, the Shell Oil Dominguez Refinery was also developed to the southeast of the project site. This development is also shown on the 1953 USGS topographic map.

By 1963, the residential subdivision north of the project site was completed and a residential subdivision directly to the east of the project site was developed. The project site itself had been recently been graded, and scars from ground disturbance are visible on the earth throughout the project site. Directly to the north of

the project site Towne Avenue Elementary School was developed, though Martin Luther King Jr. Street had not yet been constructed. The I-405 and the I-110 Freeways, which run west of the project site, are completed by this time and are visible on both the 1963 aerial and USGS Topographic map. The broader project vicinity had experienced several new developments in the area, including a large residential development to the south and west of the project site during the decade between 1952 and 1963.

By 1972, historic aerials indicate that the development to the south and west of the project site had largely reached its current extent. The area to the northeast, which was partially developed as California State University, Dominguez Hills, was still largely being used as an oil field. Over the next few decades California State University, Dominguez Hills overtook the unused land and spread from South Avalon Boulevard in the west to South Central Avenue to the east. At this time, the project site itself was developed into a golf course. Martin Luther King Jr. Street, which borders the project site on the north, was developed and the Goodyear Blimp Site was also developed. The golf course included 18 holes, a clubhouse and parking lot in the north, a practice range, and the channelization of the Dominguez Brach Line, which runs through the project site and meets the Dominguez Channel at the southwestern corner of the project site.

Previous Evaluations of the Victoria Golf Course

In December 2016, Sapphos Environmental Inc. (Sapphos) prepared an historical significance evaluation for the County of Los Angeles Department of Public Works. This study, titled Historical Resources Evaluation for The Links at Victoria Golf Course, found that:

> The Links is one of the first municipal golf courses designed and constructed on a closed landfill, initiating a trend to repurpose otherwise unusable land into land of beneficial use to the public[1]…The manmade landscape, setting, buildings, and structures do not retain sufficient historic integrity or meet the criteria for listing as a historic district; nor do any of the buildings, structures, or landscape qualify independently for listing in the National Register of Historic Places (NRHP), CRHR, and County Register.

The 2016 evaluation found all buildings and structures associated with The Links at Victoria Golf Course ineligible, and also found that "the driving range, putting greens and fairways, and clubhouse…have been substantially altered and do not retain sufficient integrity; therefore they are not eligible for listing as a historic district in the NRHP, CRHR, and County Register pursuant to Criterion A/1" (Sapphos 2016: 7-1). The report goes on to state that despite this finding, The Links, exclusive of the buildings and landscape, "possesses historical significance and is eligible for listing as an individual site in the CRHR and County Register pursuant to Criterion 1" (Sapphos 2016:6-23).

[1] This statement is not further documented in the report.

The Office of Historic Preservation (OHP) guidelines (2002) state the following with regards to the integrity of historical resources:

> In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance…Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

As explained in more detail below, Dudek conducted a pedestrian survey of the project area on May 9, 2018, for historic-age built-environment resources and archaeological resources, and also conducted building development and archival research on the entire golf course property. The survey and research indicated that alterations to the buildings and golf course have significantly compromised the integrity of the subject property. Following the OHP guidance above, because the subject property no longer retains integrity, it cannot convey its important historical associations and is not eligible for designation.

5 CULTURAL RESOURCES SURVEY

Dudek Architectural Historian Sarah Corder, MFA, and Dudek Archaeologist Erica Nicolay, MA conducted a pedestrian survey of the project area on May 9, 2018, for historic age built-environment resources and archaeological resources. Exposed ground surface was inspected for archaeological resources; however, the project site has been impacted by landscaping associated with the golf course, and there are few places where native soil is present. Ground visibility within the project site ranges from good to poor. No archaeological resources were identified during the survey.

During the built- environment portion of the survey, all buildings, structures, and golf course design elements constructed over 45 years ago were surveyed and recorded. The built-environment component of the survey entailed documenting each building with notes and photographs, specifically noting character-defining features, spatial relationships, and any observed alterations. The survey area was photographed using a digital camera. All field notes, photographs, and records related to the current study are on file at Dudek's office in Pasadena, California.

5.1 Description of Surveyed Resources

The project site contains a clubhouse complex, two outbuildings, 18-hole golf course, driving range, putting green and a variety of heavy mechanical equipment throughout the site to support the use of the property as a golf course. Department of Parks and Recreation Series 523 Forms (DPR forms) are provided in Appendix C.

Clubhouse Complex

The clubhouse complex is a series of buildings tied together with exposed beams, roof overhangs, covered walkways, and a central courtyard. The complex is predominately clad in concrete block, but there are various sections that are stuccoed.

Northwest (Main) Elevation: The main elevation of the complex is accessed via a large parking area located to the northeast of the building. Access to the complex is via a central concrete walkway leading to a metal gate. Once past the metal gate, the overhang of the roofline provides a covered walkway to the main courtyard area. The main elevation of the complex presents as the following four sections: southeastern most section that features exposed beams and projects approximately 15 feet from the central block of the building , a central block that serves as the buildings entrance and provides access to the central courtyard , and a large concrete block wall with metal letters that read "Victoria County Golf Course County of Los Angeles" and inset concrete block pilasters that partially obscures the view of the northwestern section of the complex (see Figures 9, 10, and 11).



Figure 9. Main elevation of the Clubhouse Complex, view to southeast, Image No. IMG_5945.



Figure 10. Main elevation of southeast section of the Clubhouse Complex, view to southeast, Image No. IMG_5957.



Figure 11. Main elevation of the northwest section of the complex, view to southwest, Image No. IMG_5966.

Southwest (Rear) Elevation: The rear of the building faces onto the golf course and is used as a primary point of entry from the course to the amenities of the course. Unlike the main façade of the building, the rear elevation presents with clearly defined and visible use patterns and entry points. The four distinct sections of the rear elevation are characterized by a café, administrative offices/locker room facilities, the Pro Shop, and the maintenance and washing areas for the golf carts. The complex is grouped around a centralized, concrete patio (see Figure 12).

The café and administrative offices are set on the same visual plane as each other and are connected by a partially covered walkway. Both sections feature large, fixed windows that are sheltered by the overhang of the roofline. Entry into the café is through a set of metal and glass double-doors that lead out onto a patio that overlooks the course. The administration/locker room section features entry points from the courtyard on the southeast elevation of the building (see Figures 12 and 13). The locker room entrances are partially sheltered by the connecting beams and roof system that links the northwest section to the southeast section of the complex. The west elevation of this section of the complex features fixed windows for the café and the remainder of the elevation features stucco clad and concrete block sections without openings. The concrete block sections are interrupted by insert pilasters.

The next portion of the elevation is the southeast section of the complex. The southeastern section of the complex appears as one continuous building that begins with the Pro Shop, with entry through metal and glass doors from the central courtyard, and is followed with a variety of spaces including small offices and repair bays for the golf carts. The bulk of this elevation on this side of the complex is dominated by five bays with metal roll-up doors that function as maintenance garages. At the end of this elevation there is a small, partially enclosed carport area that is used for washing the carts (See Figures 12 and 14).

From the east elevation of the building, the cart washing station is visible, and the remainder of the elevation features concrete block with equally spaced inset pilasters. The west elevation features the entrance to the Pro Shop and faces onto the central courtyard.



Figure 12. Rear elevation of southwest section of the Clubhouse Complex, view to northeast, Image No. IMG_5834.



Figure 13. Northwest section of the Clubhouse Complex, Image No. IMG_5853.



Figure 14. Pro Shop and Maintenance Area of southwest section of the Clubhouse Complex, view to northeast, Image No. IMG_5906.

Golf Course

The golf course is a regulation 18-hole golf course with Bermuda grass greens and fairways, a driving range, and a practice area that includes a sand bunker, chipping area, and multi-tiered putting green. The course has 6,847 yards of golf for a par 72. The driving range is situated to the front of the course, as is the putting green and practice areas. Concrete paths meander through the course providing access to all 18 holes. Figure 15 depicts the hold numbering sequence. Figures 16 and 17 provide overviews of the course.

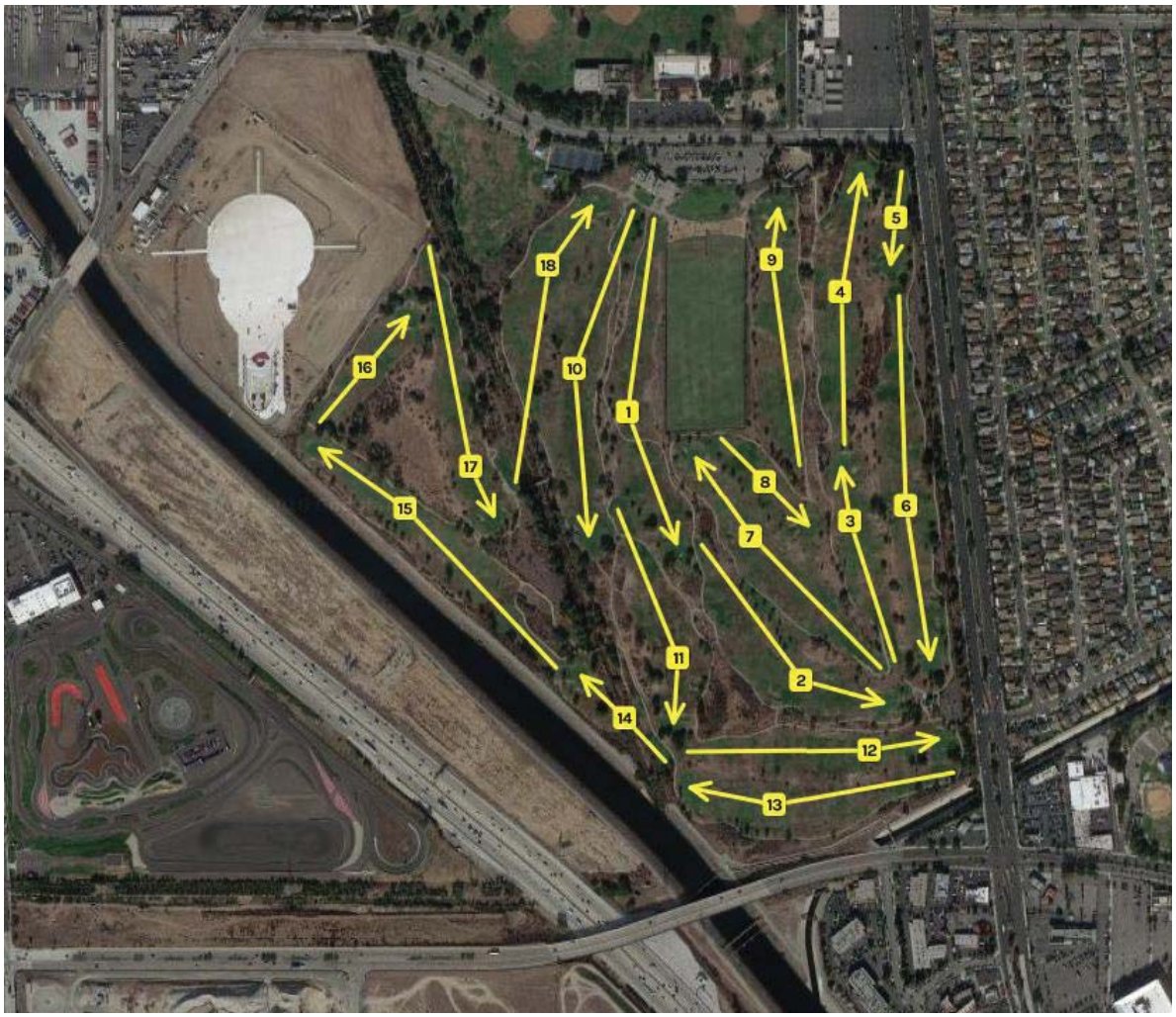

Figure 15. Current Golf Course Layout (Blue Golf 2018).



Figure 16. Course Overview, view to northeast, Image No. IMG_5688.



Figure 17. Course Overview, view to southeast, Image No. IMG_5466.

Outbuilding 1

Outbuilding 1 is a one-story stucco clad building that features a shed roof. The building features three bays with metal roll-up doors, which dominate the main (northwest) elevation of the building. On the eastern-most end of the building, there is an enclosed bay that features two entry doors and appears to function as an office and storage room. The remaining elevations feature irregular fenestration and show evidence of window replacement, original metal-frame windows, and boarded up openings. It is likely that the building served a maintenance and/or groundskeeping function originally and appears to maintain that use today. The building is within a fenced in area that contains a variety of materials, storage containers, dumpsters, and heavy equipment (see Figure 18).



Figure 18. Outbuilding 1 Northwest Elevation, view to southwest, Image No. IMG_5768.

Outbuilding 2

There is a small, stucco-clad restroom building located near the southeast corner of the course. The building features a gabled roof with composition shingles and is rectangular in plan. The main (west) elevation features two metal entry doors, one for the men's restroom and one that is likely for a storage room. There is also a one-by-one, metal-frame window that is offset to the north. The south elevation features a water fountain and has two louvered vents at the apex of the gable. The east elevation features a single entry door offset to the north that provides access to the women's restroom. This elevation also features a one-by-one, metal-frame window that is offset to the south. The north elevation has no entry points or windows, but there are two louvered vents located in the apex of the gable, which match the vents seen on the south elevation. The current opening configuration does not appear to be original to the building and is likely the result of a more recent remodel that took place at an unknown date (see Figure 19).



Figure 19. Outbuilding 2, view to northeast, Image No. IMG_5692.

Bridges

There are two small concrete bridges that provide access from the east side of the storm channel to the west side of the storm channel. The bridges are wide enough for a single golf cart to pass and feature simple metal railings (see Figures 20 and 21).



Figure 20. Bridge 1, view to northwest, Image No. IMG_5524.



Figure 21. Bridge 2, view to northeast, Image No. IMG_5649.

Mechanical Equipment

There are a series of mechanical devices located on the property that appear to support the function of the site as a golf course (see Figures 22).



Figure 22. Mechanical Equipment, Image No. IMG_5747.

6 SIGNIFICANCE EVALUATION

6.1 Victoria Golf Course

The development of the subject property began in 1966 with construction of the course and support buildings. Since its original development, the subject property has remained a Los Angeles County municipal golf course. While the proposed project intends to develop only a portion of the existing golf course property, as a resource, the golf course property must be evaluated as a whole. Therefore, the boundaries of the resource evaluated (the Victoria Golf Course) extend beyond the project site boundaries. The following provides an evaluation of the Victoria Golf Course in consideration of NRHP and CRHR designation criteria and integrity requirements.

NRHP/CRHR Designation Criteria

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

The subject property is one of many municipal golf courses constructed around the mid-twentieth century. The County began the process to develop municipal golf courses in 1938 with the Santa Anita Golf Course. By the time the Victoria Golf Course was developed, there were 14 other municipal golf courses operated by the County. While this is an interesting period of development for the County Department of Parks and Recreation golf division, the Victoria Golf Course was one of many developed in the Greater Los Angeles area between the 1950s and 1970s. Furthermore, the course is a modest example of municipal golf courses in Los Angeles and has been significantly altered since its original design and construction. Due to a lack of significant associations with events important to history, the subject property does not appear eligible under NRHP/CRHR Criterion A/1.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research failed to indicate any associations with significant persons. For these reasons, the subject property does not appear eligible under NRHP/CRHR Criterion B/2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Victoria Golf Course was designed by well-known golf course designer William F. Bell. Despite its association with this prolific golf course architect, the course has been heavily altered numerous times over the years and no longer retains requisite integrity of Bell's original design. Changes to the irrigation systems, regrading, reseeding, new plantings, and the addition of golf course paths that have altered the original use and traffic patterns within the course, and ultimately compromised the integrity of the course's original design and materials.

Original building plans for the clubhouse building and associated landscape design features indicate that the building was design by architect Edwin H. Ripperdan and landscape designer Edward R. Lowell. Archival research failed to indicate any significant works by either designer; therefore, it appears that neither designer was a master architect or important creative individual. The building also represents a modest example of the Mid-Century Modern style of architecture and does not serve as a significant example of the style. With regard to the clubhouse complex, there is evidence of significant roof changes, replacement doors, replacement windows, reconfiguration of openings, infill openings, and landscape design changes. In addition, Outbuildings 1 and 2 have been significantly altered over the years, including replacement windows and the reconfiguring of openings. For all of these reasons, the subject property does not appear eligible under NRHP/CRHR Criterion C/3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The golf course has not and is unlikely to yield any information important in prehistory or history given the disturbed nature of the site, and therefore does not appear eligible under NRHP/CRHR Criterion D/4.

Integrity Considerations

Since initial development of the subject property as the Victoria Golf Course, the property's location has remained unchanged, always located on a large parcel and functioning as a municipal golf course. When the golf course was developed, the surrounding area was already developed and appears to maintain a similar level of development; therefore, the subject property retains integrity of setting. However, the course and the clubhouse complex have experienced significant alterations since original construction that have compromised the integrity of design, materials, and workmanship. With regards to the clubhouse complex, there is evidence of significant roof changes, replacement doors, replacement windows, reconfiguration of openings, infill openings, and landscape design changes. Therefore, the clubhouse complex does not retain the requisite integrity of design, materials, and workmanship. These alterations have also diminished the feeling and association of the clubhouse complex. In addition to alterations to the clubhouse complex, outbuildings 1 and 2 have been significantly altered over the years, including replacement windows and reconfiguring of openings.

The integrity of the golf course is also part of the subject property's overall integrity. The course was originally designed by William F. Bell, but was significantly altered multiple times over the years starting in the 1970s with work on specific fairways, renovation of the front nine holes, new irrigation systems, and construction of additional paths. Further, in the late 1990s that the entire course was redesigned by Casy O'Callaghan. During the 1990s renovations, the course was regraded; fill dirt was added to elevate the course an average of 2 feet; new irrigation systems were added; 500 trees were planted on the site; new drainage systems were put in place; and alterations were made to the greens and sand bunkers. Therefore, the 1970s renovations combined with the 1990s renovations significantly altered the design, materials, workmanship, feeling, and association.

In summary, alterations to the subject property buildings and golf course have significantly compromised the integrity of the subject property.

Los Angeles County Designation Criteria

For all of the reasons described in the NRHP/CRHR significance evaluation presented above, the Victoria Golf Course appears not eligible for local designation under County Criteria 1, 2, 3, and 4. Further, the golf course has not been formally determined eligible for listing in either the CRHR or NRHP, therefore, the Victoria Golf Course is not eligible under County Criterion 5. Finally, the project does not contain any trees, landscapes, or natural features that should be considered historically significant. Therefore, the golf course is not eligible under County Criteria 6 and 7.

Conclusions

The Victoria Golf Course was recorded and evaluated in consideration of NRHP and CRHR designation criteria and integrity requirements. As a result of the significance evaluation, the course and its associated buildings was found not eligible under all NRHP and CRHR designation criteria and integrity requirements.

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7 FINDINGS AND MANAGEMENT RECOMMENDATIONS

The current study included a CHRIS records search, Native American coordination, building development and archival research, a pedestrian survey, and evaluation of the Victoria Golf Course for NRHP and CRHR eligibility (see complete DPR form in Appendix C).

7.1 Summary of Findings

Historic Built Environment

As a result of the historic significance evaluation, all buildings, structures, and golf course components associated with the Victoria Golf Course were found not eligible under all NRHP and CRHR designation criteria and integrity requirements. Therefore, the property is not considered an historical resource for the purposes of CEQA, and no recommendations for management are required.

Archaeology

No archaeological resources were identified within the project site as a result of the CHRIS records search, Native American outreach, or intensive pedestrian survey.

To date, one response has been received from a representative of the Gabrielino Band of Mission Indians-Kizh Nation, stating that the project site may have potential for discoveries of cultural resources and recommending that a Native American monitor from their tribe be present for all ground disturbance. Should any more responses be received, they will be forwarded to the County.

Ground visibility within the project site was generally low, as much of the area has been extensively landscaped. Historic aerial review and research into the project site indicated that between 1948 and 1959 the project site was used as a landfill for surrounding communities. After this, the site was graded and landscaped in order to function as a golf course. Additionally, no cultural resources have been previously recorded within the project site. However, SCCIC records indicate that two resources have been previously recorded within 0.5 miles of the project site. One of the resources is a prehistoric site that was recorded in 1939 and updated in 1951. Since then, extensive development has likely destroyed any remnants of the site. Due to these factors, the likelihood of encountering archaeological resources on the project site is low. However, it is always possible that unanticipated discoveries could be encountered in previously undisturbed soils during ground-disturbing activities associated with the proposed project. Management recommendations to reduce potential impacts to unanticipated archaeological resources and human remains during construction activities are provided below. With inclusion of these recommendations, the proposed project will have a less-than-

significant impact on historical resources. No additional mitigation is required beyond these standard protection measures (see Section 7.2).

7.2 Management Recommendations

Unanticipated Discovery of Archaeological Resources

If archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate specimens in a repository with permanent retrievable storage and submit a written report to the lead agency for review and approval prior to occupancy of the first building on the site.

Once artifact analysis is completed, a final written report detailing the results of all research procedures and interpretation of the site shall be submitted to the lead agency for review and approval prior to occupancy of the first building on the site.

Inadvertent Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the NAHC in Sacramento within 24 hours. In accordance with the PRC, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

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APPENDIX A

CONFIDENTIAL SCCIC Records Search Results

APPENDIX B

Native American Group Coordination

Linda Kry

From: Erica Nicolay
Sent: Wednesday, March 7, 2018 1:30 PM
To: 'nahc@nahc.ca.gov'
Subject: SLF and Consultation List Request-Kimmelman Sports Foundation Project
Attachments: Dudek_Kimmelman_10951.pdf

To whom it may concern,

Please find the attached Sacred Lands File and Native American Contacts List Request for the Kimmelman Sports Foundation Project (Project Number 10951). The project involves the construction of a new youth sports complex on the existing Links at Victoria Golf Course (Victoria Golf Course), located at 340 East 192nd Street in the City of Carson, California.

If you have any comments or concerns please contact me at this email or at the phone numbers listed below.

Thank you,

Erica Nicolay, MA
Archaeologist

DUDEK
38 North Marengo Avenue
Pasadena, California 91101
O: 626.204.9830
C: 760.936.7952
Ext. 5230
www.dudek.com

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Kimmelman Foundation Center Project (10951)

County: Los Angeles

USGS Quadrangle

Name: Torrance (see attached map)

Township: 3S, 4S Range: 13W Section(s): 4, 5, 6, 7, 8, 9, 31, 32

Company/Firm/Agency:

Dudek

Contact Person: Erica Nicolay

Street Address: 38 North Marengo Avenue

City: Pasadena Zip: 91101

Phone: (626) 240-9830 Extension: N/A

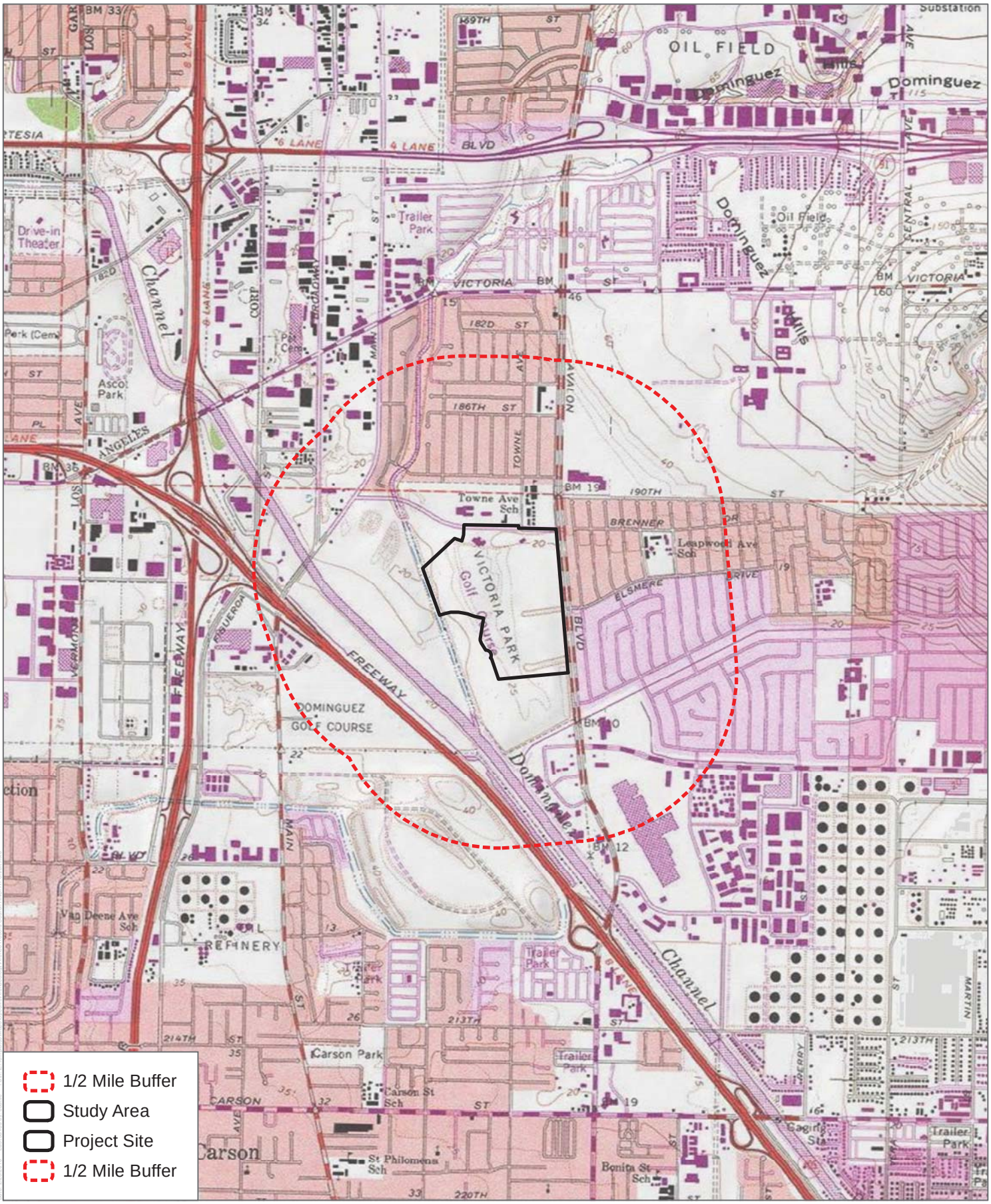
Fax: (760) 632-0164

Email: enicolay@dudek.com

Project Description:

The Kimmelman Foundation Center Project involves the construction of a new youth sports complex on the existing Links at Victoria Golf Course (Victoria Golf Course), located at 340 East 192nd Street in the City of Carson, California.

☑ Project Location Map is attached



SOURCE: SOURCE: USGS 7.5-Minute Series Torrance Quadrangle
Township 3S, 4S; Range 13W; Sections 4, 5, 6, 7, 8, 9, 31, 32

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

Records Search

Kimmelman Foundation Sports & Academic Resources Complex Project

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

March 8, 2018

Erica Nicolay
Dudek

Sent by E-mail: enicolay@dudek.com

RE: Proposed Kimmelman Foundation Center (10951) Project, City of Carson; Torrance USGS Quadrangle, Los Angeles County, California

Dear Ms. Nicolay:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst
(916) 373-3714

CONFIDENTIALITY NOTICE: This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication.

Native American Heritage Commission
Native American Contact List
Los Angeles County
3/8/2018

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., Gabrielino
#231
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
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gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
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West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Kimmelman Foundation Center Project, Los Angeles County.

DUDEK

38 NORTH MARENGO
PASADENA, CALIFORNIA 91101
T: 626.204.9800

March 28, 2018 10951

Mr. Charles Alvarez, Councilman
Gabrielino Tongva Tribe
23454 Vanowen St.
West Hills, CA 91307

Subject: ***Kimmelman Foundation Complex Project, City of Carson, Los Angeles County, California***

Dear Mr. Alvarez:

Dudek has been retained by Latham & Watkins LLP in support of the proposed development of a new youth sports complex on the existing Links at Victoria Golf Course (Victoria Golf Course), located at 340 East 192nd Street in the City of Carson, California. The proposed project would result in the closure of the existing Victoria Golf Course and the construction of a new youth sports complex with approximately 500,000 square feet of facilities on an approximately 170 acre site. Components of the sports complex would include a learning center, a 35,000 square foot tennis training complex with 38 tennis courts and one tennis stadium court, a multi-use health, fitness and nutrition complex, a family entertainment venue, restaurants, a driving range, a natural drainage and trail system, an indoor sky diving facility, a multi-use sports complex, 13 regulation soccer fields, and a 5-acre park. The proposed project is located in Los Angeles County, California in an unsectioned portion of Township 4 South, Range 13 West, as depicted on the attached 1:24,000 scale *Torrance* topographic quadrangle map (see attached map).

A California Historical Resources Information System (CHRIS) records search was completed at the South Central Information Center for the project study area and a 0.5-mile radius. The records search found that of two resources (one prehistoric and one historic built environment site) recorded within 0.5-mile of the project area. Neither resource intersects the project area.

Dudek contacted the California Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and a list of Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the proposed project area. The NAHC emailed a response on March 8, 2018, which stated that the SLF search failed to indicate the presence of Native American cultural resources in the immediate project area.

The NAHC recommended that we contact you regarding your knowledge of the presence of cultural resources that may be impacted by this project. If you have any knowledge of cultural

resources that may exist within or near the proposed project area, please contact me directly at either phone number listed below, enicolay@dudek.com, or at 38 North Marengo Avenue, Pasadena, CA, 91101 within 30 days of receipt of this letter.

Please note that the request herein is for informational purposes only and does not constitute Assembly Bill (AB) 52 notification or initiation of consultation. All information provided will be considered confidential and not shared with the public.

Thank you for your assistance.

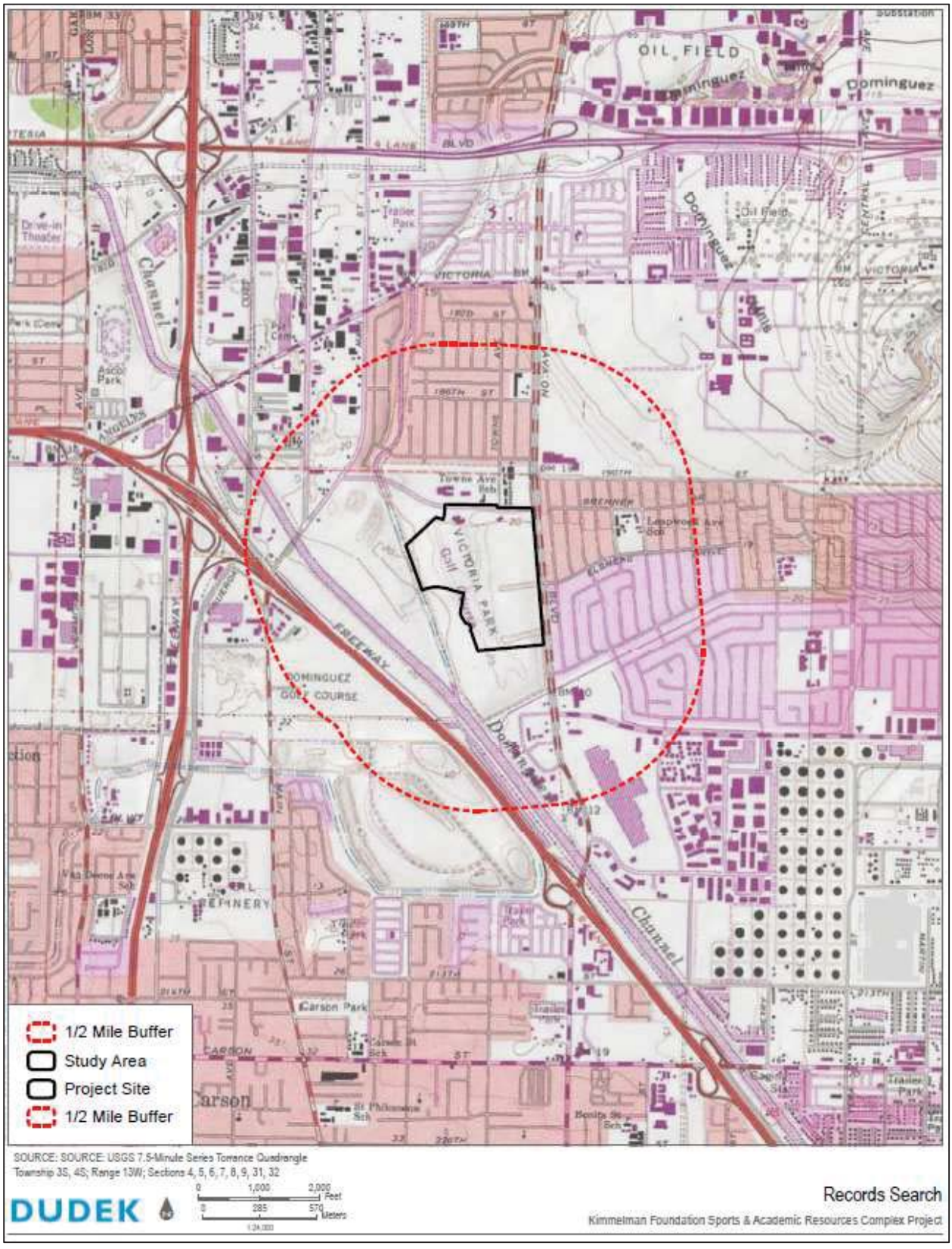
Sincerely,



Erica Nicolay, MA
Archaeologist

DUDEK
Office: 626.284.9830
Cell: 760.936.7952

Attachments: Figure 1


1/2 Mile Buffer
Study Area
Project Site
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Carson Park
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SOURCE: SOURCE: USGS 7.5-Minute Series Torrance Quadrangle
Township 3S, 4S; Range 13W; Sections 4, 5, 6, 7, 8, 9, 31, 32
DUDEK
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0 285 570 Meters
Records Search
Kimmelman Foundation Sports & Academic Resources Complex Project

DUDEK

38 NORTH MARENGO
PASADENA, CALIFORNIA 91101
T: 626.204.9800

March 28, 2018 10951

Mr. Robert F. Dorame, Tribal Chair/Cultural Resources
Gabrieleno Tongva Indians of California Tribal Council
P.O. Box 490
Bellflower, CA 90707

Subject: ***Kimmelman Foundation Complex Project, City of Carson, Los Angeles County, California***

Dear Mr. Dorame:

Dudek has been retained by Latham & Watkins LLP in support of the proposed development of a new youth sports complex on the existing Links at Victoria Golf Course (Victoria Golf Course), located at 340 East 192nd Street in the City of Carson, California. The proposed project would result in the closure of the existing Victoria Golf Course and the construction of a new youth sports complex with approximately 500,000 square feet of facilities on an approximately 170 acre site. Components of the sports complex would include a learning center, a 35,000 square foot tennis training complex with 38 tennis courts and one tennis stadium court, a multi-use health, fitness and nutrition complex, a family entertainment venue, restaurants, a driving range, a natural drainage and trail system, an indoor sky diving facility, a multi-use sports complex, 13 regulation soccer fields, and a 5-acre park. The proposed project is located in Los Angeles County, California in an unsectioned portion of Township 4 South, Range 13 West, as depicted on the attached 1:24,000 scale *Torrance* topographic quadrangle map (see attached map).

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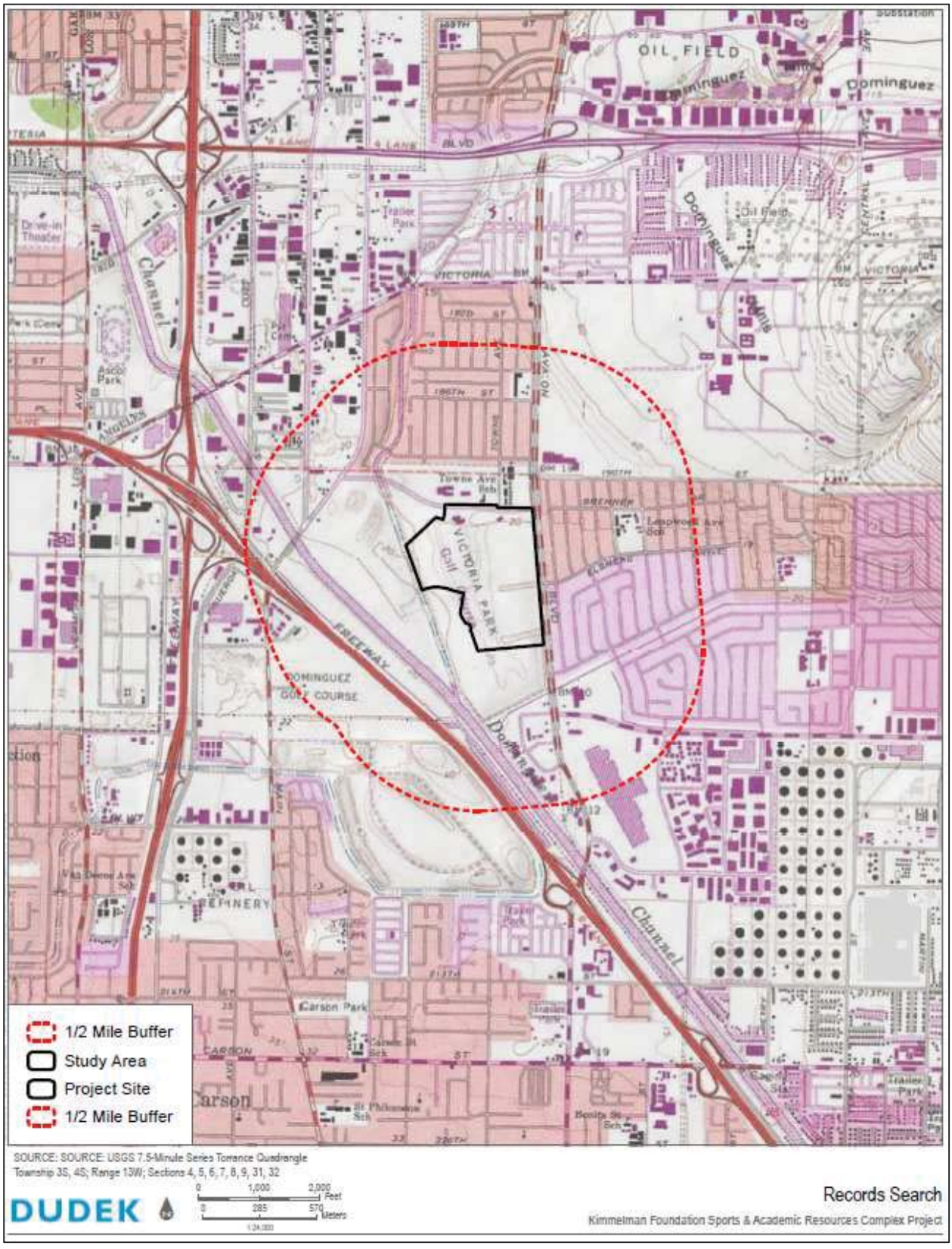
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Records Search
Kimmelman Foundation Sports & Academic Resources Complex Project

DUDEK

38 NORTH MARENGO
PASADENA, CALIFORNIA 91101
T: 626.204.9800

March 28, 2018 10951

Ms. Sandonne Goad, Chairperson
Gabrielino-Tongva Nation
106 1/2 Judge John Also St.
Los Angeles, CA 90012

Subject: ***Kimmelman Foundation Complex Project, City of Carson, Los Angeles County, California***

Dear Ms. Goad:

Dudek has been retained by Latham & Watkins LLP in support of the proposed development of a new youth sports complex on the existing Links at Victoria Golf Course (Victoria Golf Course), located at 340 East 192nd Street in the City of Carson, California. The proposed project would result in the closure of the existing Victoria Golf Course and the construction of a new youth sports complex with approximately 500,000 square feet of facilities on an approximately 170 acre site. Components of the sports complex would include a learning center, a 35,000 square foot tennis training complex with 38 tennis courts and one tennis stadium court, a multi-use health, fitness and nutrition complex, a family entertainment venue, restaurants, a driving range, a natural drainage and trail system, an indoor sky diving facility, a multi-use sports complex, 13 regulation soccer fields, and a 5-acre park. The proposed project is located in Los Angeles County, California in an unsectioned portion of Township 4 South, Range 13 West, as depicted on the attached 1:24,000 scale *Torrance* topographic quadrangle map (see attached map).

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Archaeologist

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Office: 626.284.9830
Cell: 760.936.7952

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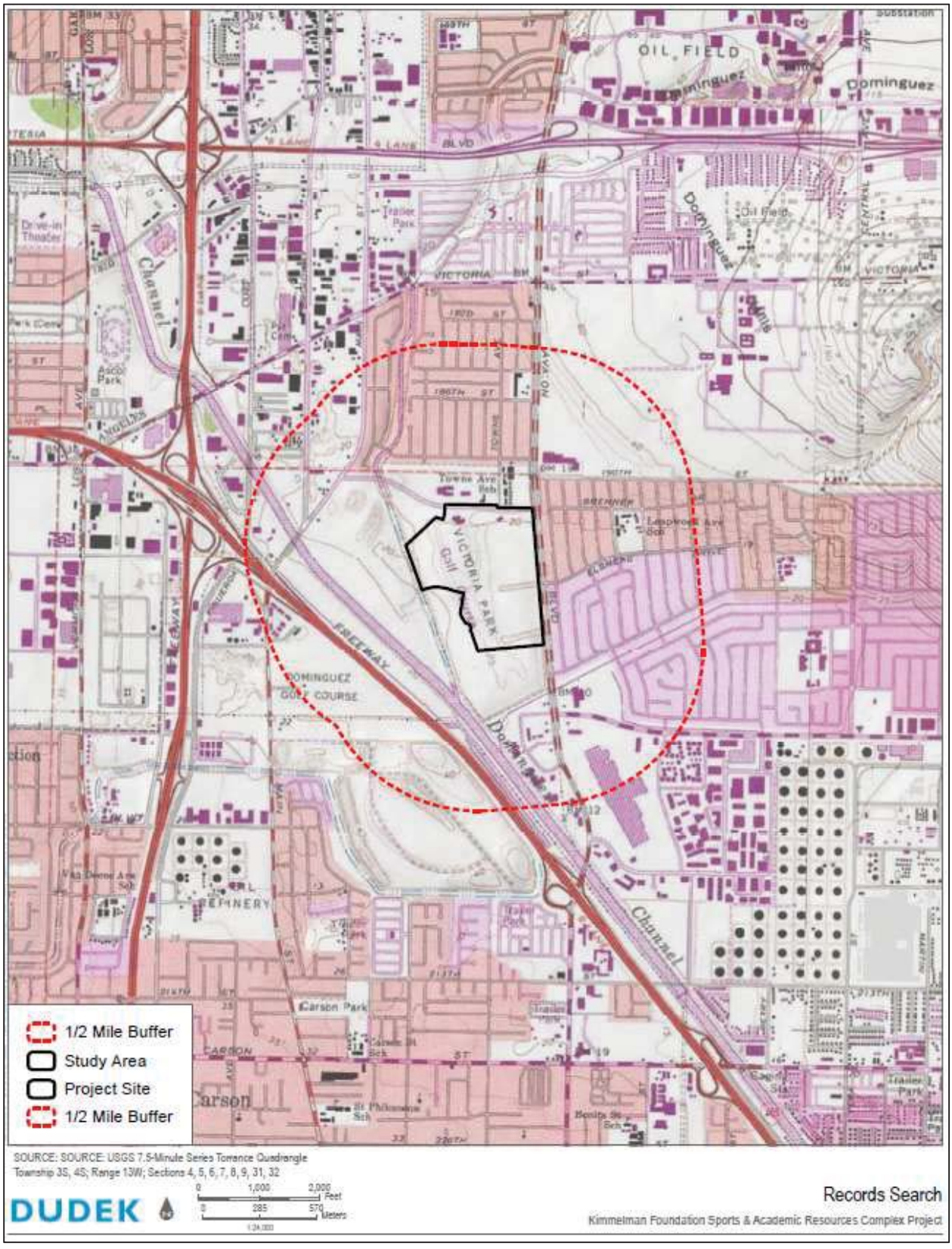
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DUDEK
Records Search
Kimmelman Foundation Sports & Academic Resources Complex Project

DUDEK

38 NORTH MARENGO
PASADENA, CALIFORNIA 91101
T: 626.204.9800

March 28, 2018 10951

Mr. Anthony Morales, Chairperson
Gabrieleno/Tongva San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778

Subject: ***Kimmelman Foundation Complex Project, City of Carson, Los Angeles County, California***

Dear Mr. Morales:

Dudek has been retained by Latham & Watkins LLP in support of the proposed development of a new youth sports complex on the existing Links at Victoria Golf Course (Victoria Golf Course), located at 340 East 192nd Street in the City of Carson, California. The proposed project would result in the closure of the existing Victoria Golf Course and the construction of a new youth sports complex with approximately 500,000 square feet of facilities on an approximately 170 acre site. Components of the sports complex would include a learning center, a 35,000 square foot tennis training complex with 38 tennis courts and one tennis stadium court, a multi-use health, fitness and nutrition complex, a family entertainment venue, restaurants, a driving range, a natural drainage and trail system, an indoor sky diving facility, a multi-use sports complex, 13 regulation soccer fields, and a 5-acre park. The proposed project is located in Los Angeles County, California in an unsectioned portion of Township 4 South, Range 13 West, as depicted on the attached 1:24,000 scale *Torrance* topographic quadrangle map (see attached map).

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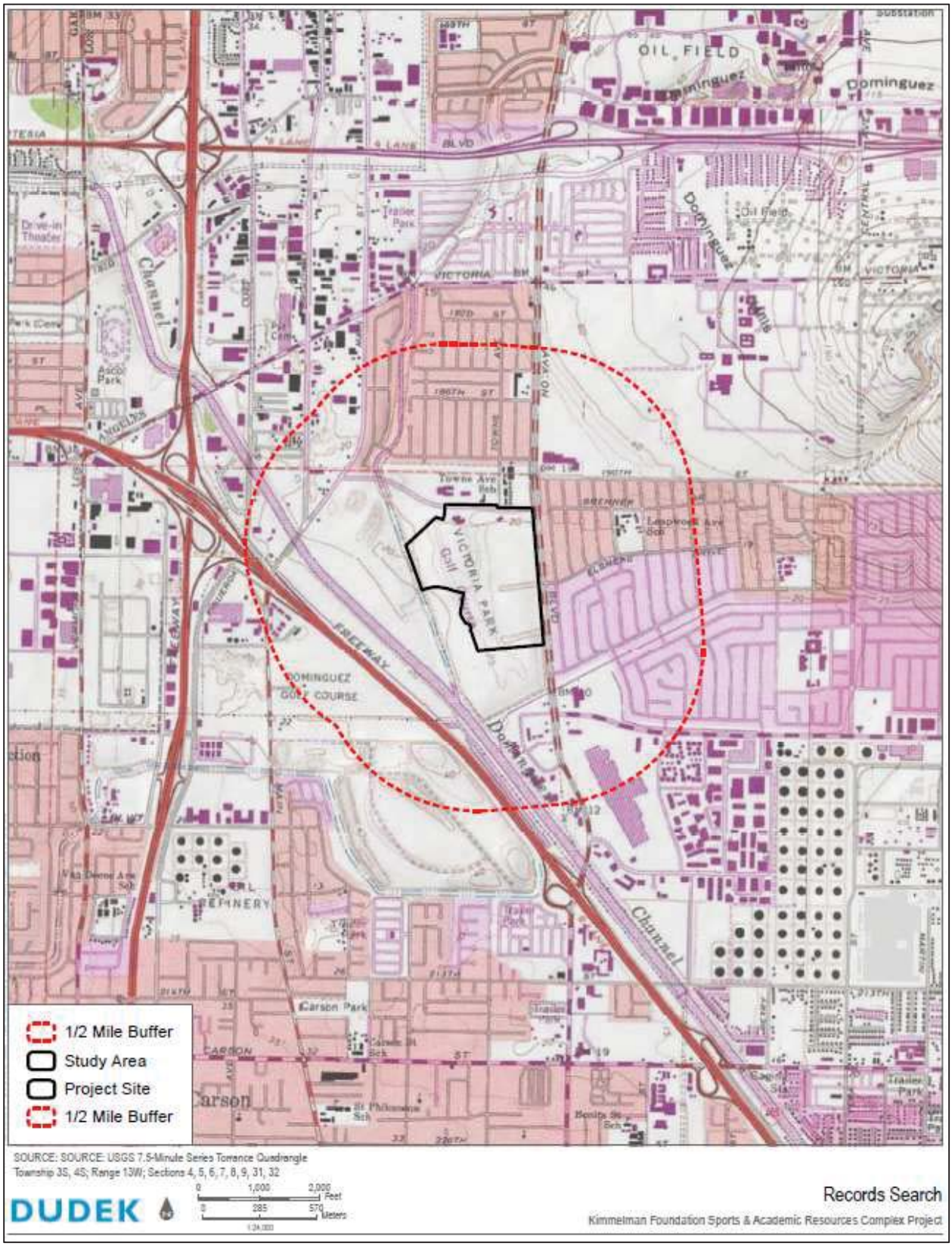
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Records Search
Kimmelman Foundation Sports & Academic Resources Complex Project

DUDEK

38 NORTH MARENGO
PASADENA, CALIFORNIA 91101
T: 626.204.9800

March 28, 2018 10951

Mr. Andrew Salas, Chairperson
Gabrieleno Band of Mission Indians
P.O. Box 393
Covina, CA 91723

Subject: ***Kimmelman Foundation Complex Project, City of Carson, Los Angeles County, California***

Dear Mr. Salas:

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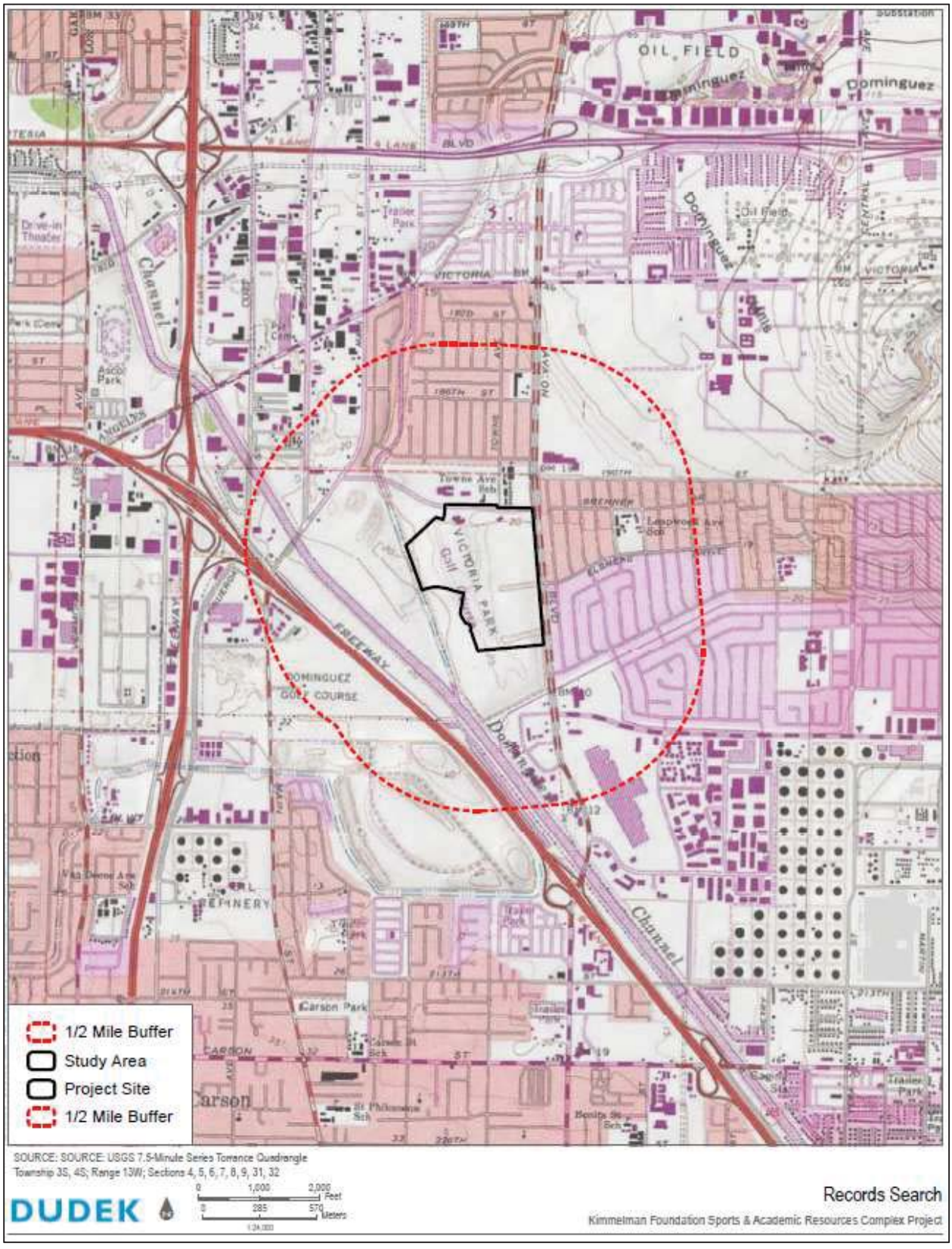
Mr. Salas:

Subject: Kimmelman Foundation Complex Project, City of Carson, Los Angeles County, California



Gabrieleno Band of Mission Indians – Kizh Nation

Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

April 5, 2018

Regarding: Foundation Complex Project City of Carson , Los Angeles

Dear Erica Nicolay,

This email is in response to the above referenced project located at 340 East 192nd St. Carson, CA. The project location is within our Ancestral territory which may have potential for discoveries of our cultural resources . Therefore, we would like to request that one of our Native Monitors be present during any and all ground disturbances.

Should you have any questions or concerns, please contact our office at 844-390-0787.

Thank you,

Andrew Salas
Chairman, Gabreileno Band of Mission Indians-Kizh Nation

APPENDIX C

DPR Forms

State of California ♦ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6z

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 15 ***Resource Name or #:** (Assigned by recorder) Victoria County Golf Course
P1. Other Identifier: The Links at Victoria Golf Course
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Los Angeles County **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Torrance **Date** 2017 **T** 3S; **R** 13W; SW ¼ **of** SW ¼ ☐ **of Sec** ; San Bernardino **B.M.**
c. Address 340 Martin Luther King, Jr. Street City Carson Zip 90746
d. UTM: (Give more than one for large and/or linear resources) Zone 11S , 382510.22 mE/ 3746923.19 mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
AIN: 7339-017-917. The Victoria County Golf Course is located in the City of Carson. The site is northeast of the Dominguez Channel and east of the junction of Interstate 405 (I-) 405 and I-110. The project site is bounded by East 192nd Street to the north, South Avalon Boulevard to the east, and the remaining portion of the Victoria Golf Course to the south and west.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The subject property includes the entire Victoria County Golf Course site. The site contains a clubhouse complex, two outbuildings, 18-hole golf course, driving range, putting green and a variety of heavy mechanical equipment throughout the site to support the use of the property as a golf course. (See Continuation Sheet)

***P3b. Resource Attributes:** (List attributes and codes) HP19. Bridge; HP20. Canal; HP29. landscape architecture

P5a. Photograph or Drawing



***P4. Resources Present:**
☒ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)
P5b. Description of Photo: (view, date, accession #) IMG_5688, November 9, 2017; View to northeast
***P6. Date Constructed/Age and Source:**
[x] Historic ☐ Prehistoric ☐ Both
1967 (Los Angeles Times)
***P7. Owner and Address:**
County of Los Angeles
500 W Temple St. Rm 358
Los Angeles, CA 90012
***P8. Recorded by:** (Name, affiliation, and address) Sarah Corder, Dudek
38 North Marengo Avenue
Pasadena, CA 91101
***P9. Date Recorded:** November 9, 2017
***P10. Survey Type:** (Describe)
Pedestrian

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Corder et al. 2018. Cultural Resources Study for the Carol Kimmelman Sports and Academic Resources Center Project. Dudek.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

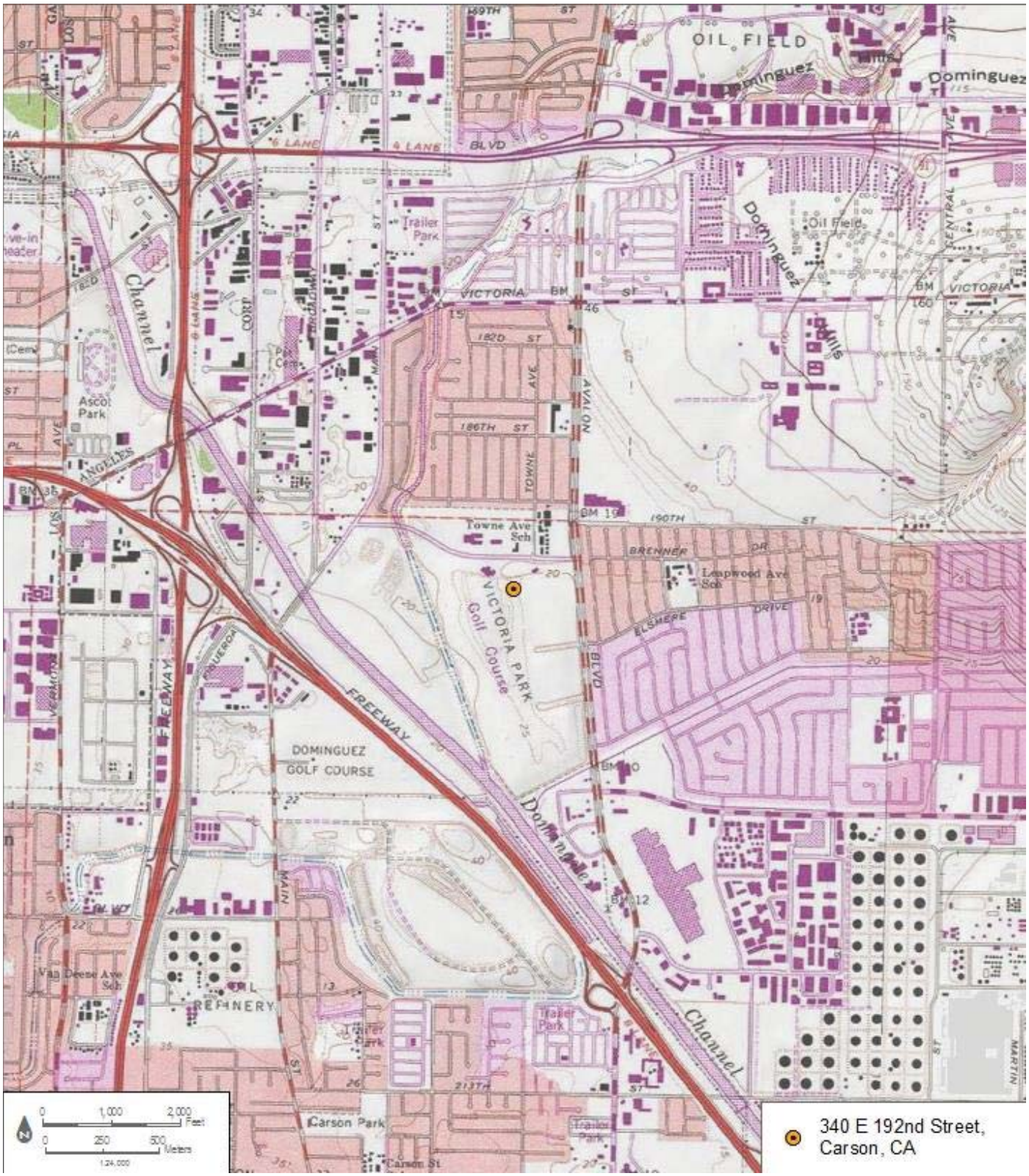
State of California ♘ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#

Trinomial

 ***Resource Name or #** (Assigned by recorder) Victoria County Golf Course
***Map Name:** Torrance, CA ***Scale:** 1:24,000 ***Date of map:** 2017



BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) Victoria County Golf Course ***NRHP Status Code** 6Z
Page 3 **of** 15

B1. Historic Name: Victoria County Golf Course
B2. Common Name:
B3. Original Use: Recreation
B4. Present Use: Recreation
***B5. Architectural Style:** Designed landscape
***B6. Construction History:** (Construction date, alterations, and date of alterations)
The Victoria County Golf Course was established in 1967. (See Continuation Sheet)

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:**
B9a. Architect: William F. Bell; Edwin H. Ripperdan b. Builder:
***B10. Significance: Theme** n/a **Area** n/a
Period of Significance n/a **Property Type** Golf Course **Applicable Criteria** n/a
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The subject property was originally one of the many land holdings of the Dominquez family and was under the ownership of the Dominquez Estate Company for many years prior to its development. According to historic aerial photographs and archival research, the subject property appears undeveloped during the first half of the twentieth century. However, the development of the property began to shift starting in the late 1940s and early 1950s. During these years, the Dominguez Estate Company entered into multiple lease agreements for the property. The first lease agreement was for the Bak Disposal Company for a period of 10 years starting on July 21, 1948. The second lease agreement was for the Rancho Angeles Trap and Skeet Club for a period of 5 years starting on July 7, 1955 (Will 1957). (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) n/a
***B12. References:**

(See Continuation Sheet)

B13. Remarks:

***B14. Evaluator:** Sarah Corder, MFA
***Date of Evaluation:** 6/27/18

(Sketch Map with north arrow required.)



(This space reserved for official comments.)

P3a. Description (Continued):

Clubhouse Complex
The clubhouse complex is a series of buildings tied together with exposed beams, roof overhangs, covered walkways, and a central courtyard. The complex is predominately clad in concrete block, but there are various sections that are stuccoed.

Northwest (Main) Elevation: The main elevation of the complex is accessed via a large parking area located to the northeast of the building. Access to the complex is via a central concrete walkway leading to a metal gate. Once past the metal gate, the overhang of the roofline provides a covered walkway to the main courtyard area. The main elevation of the complex presents as the following four sections: southeastern most section that features exposed beams and projects approximately 15 feet from the central block of the building , a central block that serves as the buildings entrance and provides access to the central courtyard , and a large concrete block wall with metal letters that read “Victoria County Golf Course County of Los Angeles” and inset concrete block pilasters that partially obscures the view of the northwestern section of the complex.

Southwest (Rear) Elevation: The rear of the building faces onto the golf course and is used as a primary point of entry from the course to the amenities of the course. Unlike the main façade of the building, the rear elevation presents with clearly defined and visible use patterns and entry points. The four distinct sections of the rear elevation are characterized by a café, administrative offices/locker room facilities, the Pro Shop, and the maintenance and washing areas for the golf carts. The complex is grouped around a centralized, concrete patio.

The café and administrative offices are set on the same visual plane as each other and are connected by a partially covered walkway. Both sections feature large, fixed windows that are sheltered by the overhang of the roofline. Entry into the café is through a set of metal and glass double-doors that lead out onto a patio that overlooks the course. The administration/locker room section features entry points from the courtyard on the southeast elevation of the building. The locker room entrances are partially sheltered by the connecting beams and roof system that links the northwest section to the southeast section of the complex. The west elevation of this section of the complex features fixed windows for the café and the remainder of the elevation features stucco clad and concrete block sections without openings. The concrete block sections are interrupted by insert pilasters.

The next portion of the elevation is the southeast section of the complex. The southeastern section of the complex appears as one continuous building that begins with the Pro Shop, with entry through metal and glass doors from the central courtyard, and is followed with a variety of spaces including small offices and repair bays for the golf carts. The bulk of this elevation on this side of the complex is dominated by five bays with metal roll-up doors that function as maintenance garages. At the end of this elevation there is a small, partially enclosed carport area that is used for washing the carts.

From the east elevation of the building, the cart washing station is visible, and the remainder of the elevation features concrete block with equally spaced inset pilasters. The west elevation features the entrance to the Pro Shop and faces onto the central courtyard.

Golf Course
The golf course is a regulation 18-hole golf course with Bermuda grass greens and fairways, a driving range, and a practice area that includes a sand bunker, chipping area, and multi-tiered putting green. The course has 6,847 yards of golf for a par 72. The driving range is situated to the front of the course, as is the putting green and practice areas. Concrete paths meander through the course providing access to all 18 holes.

Outbuilding 1
Outbuilding 1 is a one-story stucco clad building that features a shed roof. The building features three bays with metal roll-up doors, which dominate the main (northwest) elevation of the building. On the eastern-most end of the building, there is an enclosed bay that features two entry doors and appears to function as an office and storage room. The remaining elevations feature irregular fenestration and show evidence of window replacement, original metal-frame windows, and boarded up openings. It is likely that the building served a maintenance and/or groundskeeping function originally and appears to maintain that use today. The building is within a fenced in area that contains a variety of materials, storage containers, dumpsters, and heavy equipment.

Outbuilding 2
There is a small, stucco-clad restroom building located near the southeast corner of the course. The building features a gabled roof with composition shingles and is rectangular in plan. The main (west) elevation features two metal entry doors, one for the men's restroom and one that is likely for a storage room. There is also a one-by-one, metal-frame window that is offset to the north. The south elevation features a water fountain and has two louvered vents at the apex of the gable. The east elevation features a single entry door offset to the north that provides access to the women's restroom. This elevation also features a one-by-one, metal-frame window that is offset to the south. The north elevation has no entry points or windows, but there are two louvered vents located in the apex of the gable, which match the vents seen on the south elevation. The current opening configuration does not appear to be original to the building and is likely the result of a more recent remodel that took place at an unknown date.

Bridges
There are two small concrete bridges that provide access from the east side of the storm channel to the west side of the storm channel. The bridges are wide enough for a single golf cart to pass and feature simple metal railings.

Mechanical Equipment
There are a series of mechanical devices located on the property that appear to support the function of the site as a golf course.

B6. Construction History (Continued):

Alterations to the site began in 1968 and continued until the early 2000s. The first known alterations to the course include a renovation and reseeding of the front nine holes of the course in 1968 (LAT 1968). These renovations were followed by mechanical upgrades to the water pump system and the construction of additional paths on the course in 1971 (LAT 1971). By 1975, the course was experiencing major drainage problems and a rebuild and repair was completed on the 9th, 15th, and 16th fairways (LAT 1975). No additional alterations were found through archival research until the late 1990s and early 2000s.

Over the next couple of decades, the course declined, and there were numerous issues with ground subsistence, which was due in large part due to the course's placement atop a former landfill site (County Digest 2001). By 1997, a public notice was issued for the Preparation of a Focused Environmental Impact Report for the project site. According to the notice, the proposed work would include new irrigation systems and renovation of the golf course (LAT 1997). By the late 1990s, the course was closed for renovations and did not reopen again until the spring of 2001. The redesign is attributed to Casy O'Callaghan in 1999 according to information provided on site. The following account from the grand reopening gala details the changes that were made to the site during the $6.8 million renovation:

> Some 240,000 cubic yards of soil was used to fill in the subsided area, and to regrade and elevate most of the course an average of two to three feet. Renovation also included planting 500 trees throughout the course, installation of new irrigation system, new drainage, and improved tees, greens and sand bunkers (County Digest 2001).

Following the renovation of the course, the LAT quoted the president of the Public Links Golf Association, Craig Kessler, as saying, "It's a totally different course now" (LAT 2001). The renovations in the late 1990s revived the course, and it has been in continuous use since the post-renovation reopening in the spring of 2001. Today the golf course is an 18-hole regulation golf course with Bermuda grass greens and fairways, a driving range, and a practice area that includes a sand bunker, chipping area, and multitiered putting green. The course has 6,847 yards of golf for a par 72 (Golf Advisor 2018; Golf Now 2018; The Links at Victoria 2018).

B10. Significance (Continued):

In 1948, the Dominquez Estate Company entered into a lease agreement with Ben K. Kazarian, who operated the BKK Landfill on the property from 1948-1959. The landfill was permitted to accept the following items: household refuse, commercial refuse, solid fill materials, garbage in the form of animal or vegetable products, liquids, and semi-liquids. A review of historic aerial photographs failed to indicate any further details about the Landfill (CalEPA 2006; NETR 2018).

In 1955, the Rancho Angeles Trap and Skeet Club entered into a lease with the Dominquez Estate Company for use of the property for a Trap Club. Based on aerial photographs of the area, the club was located to the west of the storm channel and contained at least nine shooting ranges, which were likely for both skeet and trap shooting. An article from the Los Angeles Times (LAT) from 1963 discussed the relocation of the trap club and the fact that it was taking up approximately 36 acres of the site that was proposed for the development of a municipal golf course. According to the article, the County of Los Angeles Department of Parks and Recreation (LACDPR) was planning to help the trap club relocate to somewhere in the vicinity of the new golf course. While no further archival information was found on the relocation of the trap club, historic aerial photographs from 1967 show that the trap club is no longer on the site (LAT 1963; NETR 2018).

The decision to create a golf course in Carson was one that went on for many years and involved many steps from the County of Los Angeles. The plan for acquiring and developing a large site for a golf course, as was the case with the Victoria County Golf Course, was popular at the time and part of a long tradition in the County Department of Parks and Recreation. Starting with the construction of Santa Anita Golf Course in 1938, the County has a rich history of municipal golf course development. According to an article in the

LAT from 1967, County Parks and Recreation Director Norman Johnson stated the following:

> County golf courses serve two purposes: The facilities provide recreation for more than 1 million people who participate on county facilities annually, and the areas reserved for this purpose present large areas of open space from being swallowed by industrial and residential subdivisions (LAT 1967a).

While the early years of the golf course system were met with financial challenges, County Supervisor Kenneth Hahn brought about a new pay-as-you-go process for the acquisition of golf courses in Los Angeles. The following excerpt from an LAT article from 1967 outlines the interworkings of the new system of golf course acquisition starting in 1954:

> Under this system the Los Angeles County Employees Retirement Assn. holds the title to a new golfing facility and leases the facility to Los Angeles County for a maximum of 30 years.
>
> The Board of Supervisors turn over the course for operational purposes to the County Parks and Recreation Department. The department collects greens fees and other revenues, which are then used to buy the new facility from LACERA (LAT 1967a).

The first course under this new system was the Western Avenue Golf Course, which was able to be purchased by the County from the Los Angeles County Employees Retirement Association in only 8 years, instead of the 30 years allowed for payment (LAT 1967a).

By 1967, all of the County golf course purchases were made using this system including the Victoria County Golf Course site. These innovative acquisition measures helped the County to acquire numerous properties in the second half of the twentieth century resulting in the current state of the LACDPR. Currently the LACDPR operates the largest public golf course system in the United States with a total of 20 golf courses, including the following:

> Of the 20 golf courses, 13 are 18-hole regulation length courses, three are convenient 9-hole regulation length courses, one is a challenging 18-hole executive length course, one is an 18-hole par-three course, and two are 9-hole par-three courses (LACDPR 2018).

Much like other courses at the time, the Victoria County Golf Course site was purchased using this new County system and, at the time of its opening, was one of 14 courses in the County golf system (LAT 1967b). However, it would be a long road between the initial request to the property owner, Dominguez Estate Company, and the actual sale and development of the property as a municipal golf course. Starting in 1956, the County Board of Supervisors made an attempt to purchase the approximately 200-acre tract of land containing the subject property from the Dominguez Estate Company based on recommendations from the County of Parks and Recreation Commission for the development of a golf course and recreation area. However, the Dominguez Estate Company refused to sell the property at that time. The idea of a lease arrangement between the County and the Dominguez Estate Company was initially discussed in 1956, but ultimately no agreement could be reached. However, in February of 1957 the Dominguez Estate Company offered to sell the property to the County (Will 1957).

On May 28, 1957, the County Board of Supervisors approved the purchase of a 204-acre parcel from the Dominguez Estate Company (Lins 1957). However, this approval was rescinded in early June of 1957 due to discrepancies in the appraisal figures. According to Supervisor Hahn, the discrepancy in the appraisal figures ($808,000 and $1,300,000) was

too great and the approval to purchase the property needed to be rescinded (LBPT 1957a). By the end of June 1957, a public hearing was called for the proposed land purchase. Amidst opposition from Supervisor Hahn, the hearing was pushed to August 1957 (LBPT 1957b). On August 8, 1957, despite opposition from supervisor Kenneth Hahn regarding incorrect information provided to the County during the appraisal process, the Board of Supervisors voted 4 to 1 purchase the approximately 200-acre tract of land from the Dominguez Estate Company for a cost of $1,300,000 on August 8, 1957 (LAT 1957). However, the County's purchase continued to be criticized throughout the late 1950s. One example of such criticism was seen in an article in the Los Angeles Examiner in December 1959, which stated that there were questionable methods used during the acquisition and cites Supervisor Hahn's opposition to the approval for purchase (LAE 1959). Regardless, the project moved forward and leveling and covering operations for the conversion of the landfill site to a golf course began on January 8, 1960 (LAE 1960).

Plans for developing the site continued throughout the first half of the 1960s. As discussed previously, the relocation of the trap club in 1963 was one of many steps in preparing the site for its eventual use as a golf course (LAT 1963). By 1964, the Board of Supervisors approved plans to develop the site as a golf course (IST 1964_Jan 26). In 1965, a contract for the construction of an 18-hole golf course and clubhouse was awarded at a planned cost of $1,150, 734 (LAT 1965). Running parallel to these developments at the golf course site, was the city incorporation movement in Carson. However, it was decided early on in the incorporation discussions that the County would retain ownership of the golf course site regardless of the outcome of the City incorporation (LAT 1967c).

Construction continued throughout 1966 and into the spring of 1967. Despite the fact that the course was dedicated on October 10, 1966, it was not officially opened to the public until spring of 1967 (LAT 1967b, LAT 1967d; Sandoval 2006). By April 13, 1967, the Victoria County Golf Course opened to the public with over 300 golfers sampling the course. The opening of the course was described as follows (LAT 1967b, LAT 1967e):

> …Large, undulating greens of the new course and a prevailing southwesterly wind will take a toll on your score. Danger also lurks in the 57 yawning sand traps, which dot the fairways and guard the greens. And also in a flood control channel which parallels two of the holes. We feel sure golfers will find this an interesting course," said Jim Amman, supervisor of the 6,670-layout. "We believe it's the finest of the county's 14 courses." "We are particularly proud of the greens," he said. "We feel they compare with any in the nation. They are extremely large…much larger than the average. The green at the eight hole for instance, is so large a 100 foot putt is possible."…Cost of the project, course and clubhouse, was more than $900,000. "Low as well as high handicap golfers will find the course will offer a series of challenges. And they start with the 505-yard, par five first hole which Amman described as one of the most difficult at the course." "It's a good, honest par five hole," he said. "It's slightly uphill, faces into the wind and thus will play longer than 505 yards. Even a good player will find it difficult to reach the green in two. Bunkers on either side of the fairway will catch hooks and slices and the green is guarded by two traps." "Another interesting hole is the par three, 160-yard 14th hole, according to Amman. "At this hole the golfer must hit a tee shot across a flood channel," he said. "The channel is out of bounds. The hole calls for an exacting shot as the wind will push the ball back toward the channel. The green is very close to the channel." He described the par four. 435 yard, 18th hole as a "hooker's nightmare." "I believe this is the toughest hole on the course." He said. "Again the tee shot must clear the flood control channel. The fairway parallels the channel for about 200 yards

> and thus becomes a hazard for golfers who are inclined to hook their drives." The course has a driving range with 35 positions, two large practice putting greens and a spacious parking area. In the clubhouse is a pro shop, luncheon facilities and locker rooms for men and women. Assisting Amman will be starters Ed Leach, Len King and Ralph Gauthier. Art Osborn is greenskeeper. Operating the pro shop and concessions will be Harvey Chapman, member of the PGA and Gardena councilman, Oscar Widmer will serve as head teaching pro with Bill Wright, former U.S. Public Links Champion assisting. It was Supervisor Kenneth Hahn who conceived the plan of financing the construction of the county's golf courses with retirement board funds in 1954. The board, he explained, will own the course until green fees and other revenues pay off the construction cost. The course is located on a 177-acre site in an area bounded by 102nd St., Avalon Blvd, San Diego Freeway and Main St. Street address of the clubhouse is 340 E. 192nd Street. It is accessible from Avalon Blvd (LAT 1967b).

While building permits were not available for the original construction and subsequent alterations to the buildings associated with the golf course, as-built drawings and historical photographs during and shortly after construction were identified through archival research. According to architectural drawings for the clubhouse, it was designed by architect Edwin H. Ripperdan of Long Beach, California and the landscaping elements for the building were designed by landscape architect Edward R. Lowell of Long Beach, California. No additional information was found on either architect throughout the course of archival research. The following series of photographs show the golf course site during construction in 1966 or shortly after construction in 1967.

William F. Bell (aka Billy Bell Jr.), Golf Course Architect

The Bell family's golf course history in California began with William P. Bell (aka Billy Bell) (1886-1953). He played a key role in the development of golf course design and the golf movement in the United States. Billy Bell began his golf course career in a variety of lower level positions at golf courses and eventually transitioned into course maintenance and remodeling under the supervision of noted golf course architect William "Willie" Watson. After working under Watson for a few years, Billy Bell began to follow the path of becoming a golf course designer. Bell achieved a reputation as a golf course designer through numerous strategic partnerships throughout the years. For starters, Bell worked with well-known golf course designer George C. Thomas and provided illustrations for his book Golf Architecture in America: Its Strategy and Construction. Billy Bell and Thomas collaborated on numerous premiere golf course projects over the years, including Pasadena Golf Course, Griffith Park Golf Course, La Cumbre Golf Course, Los Angeles Country Club North Course, Bel-Air Golf Course, Riviera Golf Course, and the Ojai Valley Inn Golf Course. Following his time with Thomas, Bell went out on his own and designed notable golf courses including, Stanford University Golf Course, Tijuana Country Club Golf Course, Palos Verdes Golf Course, Woodland Hills Golf Course, Brookside Golf Course, and San Diego Country Club Golf Course. However, the Great Depression and flooding throughout Southern California in 1938 left Bell in a different position and he took up with another partner, A.W. Tillinghast, to rebuild damaged courses in Southern California until World War II broke out. Following the war, Billy Bell established his own design firm and focused mainly on course remodeling and redesign. In addition to his work as a designer, Billy Bell was also one of the founding members of the American Society of Golf Course Architects (ASGCA) (City of San Diego 2018; Michelson 2015a, 2015b; Richardson n.d.; SCGA 2017).

Following the close of World War II, Billy Bell's son, William F. Bell (aka Billy Bell Jr.) (1918-1984) began working at his father's firm (ASGCA 2018; City of San Diego 2018; Richardson n.d.). Billy Bell Jr. was born in Southern California and educated at the

University of California. Following World War II, Billy Bell Jr. established himself in Southern California by joining his father's architecture firm, marrying Dell Applebury, and having a child he named after his father (Michelson 2015b). In the early part of his career he collaborated with his father on numerous golf courses including, but not limited to, the following (Michelson 2015c): Tamarisk Golf Course (1953), Tucson Golf Course (1949), Bakersfield Golf Course (1949), Buena Ventura Golf Course (1932), and Newport Beach Golf Course (1954). Following the death of his father in 1953, Billy Bell Jr. took over his father's firm and ran the firm under the name of William P. Bell and Son in honor of his father. Working from his father's plan and original vision, Billy Bell Jr. took over the Torrey Pines Golf Course project and brought it to completion in 1957 (ASGCA 2018; City of San Diego 2018; Michelson 2015a, 2015c; SCGA 2017).

Despite the impressive experience he gained working for his father's firm, Billy Bell Jr. went on to become a prolific designer in his own right. While he is best known for his work on the Torrey Pines North and South Golf Courses (1957), Sandpiper Golf Course (1972), Kona Country Club Golf Course (1966), Idaho Falls Country Club Golf Course (1970), Makaha Golf Club (1969), Industry Hills Golf Course (1979), and Bermuda Dunes Golf Course (1960), he designed many courses over the years, including courses in Arizona, Idaho, Nevada, Oregon, Hawaii, and Utah. His courses included public, private, and military courses, and the bulk of his work was in California between the 1950s and 1970s. The following is an abbreviated list of the golf courses he designed in California (AHGC 2018; ASGCA 2018; City of San Diego 2018; Greenskeeper 2011; Richardson n.d.; SCGA 2017; William Bell Society 2016).

- Bakersfield Country Club (1949)
- Apple Valley Country Club (1951)
- Kern River Golf Course (1953)
- North Ridge Country Club (1954)
- Alhambra Municipal Golf Course (1955)
- Modesto Dryden Park Golf Course (1955)
- China Lake Golf Course (1956)
- Knollwood Golf Course (1956)
- Palo Alto Municipal Golf Course (1956)
- Alisal Ranch Golf Course (1956)
- Antelope Valley Country Club (1957)
- Calimesa Country Club (1958)
- Crystalaire Country Club (1958)
- Lake/Valley at Los Coyotes Country Club (1958)
- Eaton Canyon Golf Course (1959)
- Mesa Verde Country Club (1959)
- Skylinks Golf Course (1959)
- Tahquitz Creek Golf Resort Legend Course (1959)
- Jurupa Hills Country Club (1960)
- Kern Valley Golf Course (1960)
- Whittier Narrows Golf Course (1960)
- Fullerton Golf Course (1961)
- Valley Hi Country Club (1961)
- Heartwell Golf Course (1962)
- Canyon South Golf Course (1962)
- Lake Tahoe Golf Course (1962)
- Palm Desert Country Club (1962)
- Rancho Bernardo Inn (1962)
- Lake Arrowhead Country Club (1963)
- San Luis Rey Downs Golf & Country Club (1963)

- Carmel Highland Resort (1964)
- Diamond Bar Golf Course (1964)
- Olivas Links Golf Course (1964)
- Rancho San Joaquin Golf Course (1964)
- Saticoy Country Club (1964)
- Ancil Hoffman Golf Course (1965)
- Hidden Valley Lake Golf Course (1965)
- Los Verdes Golf Course (1965)
- Muroc Lake Golf Course (1967)
- Lomas Santa Fe Country Club (1968)
- Los Lagos at Costa Mesa Golf & Country Club (1968)
- Mesa Linda at Costa Mesa Golf & Country Club (1968)
- Pine Mountain Lake Country Club (1969)
- Blythe Municipal Golf Course (1969)
- Lake Wildwood Golf Course (1971)
- Bonita Golf Club (1980)
- Malibu Country Club (1980)
- Rancho Duarte Golf Club (1982)

In addition to his project work, Billy Bell Jr. also followed in his father's footsteps with his involvement in and leadership roles with the ASGCA. Billy Bell Jr. became a member of ASGCA in 1950 and from 1957-1958 he held the role as ASGCA president. In addition to his role as organization president, Billy Bell Jr. also served as secretary and treasurer, and was a member of the organization until his death in 1984 (ASGCA 2018; RI 1959; Richardson n.d.).

NRHP/CRHR Statement of Significance

The development of the subject property began in 1966 with construction of the course and support buildings. Since its original development, the subject property has remained a Los Angeles County municipal golf course. The following provides an evaluation of the subject property in consideration of NRHP and CRHR designation criteria and integrity requirements.

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

The subject property is one of many municipal golf courses constructed around the mid-twentieth century. The County of Los Angeles began the process to development municipal golf courses in 1938 with the Santa Anita Golf Course. By the time the Victoria County Golf Course was developed, there were 14 other municipal golf courses operated by the County. While this is an interesting period of development for the LACDPR golf division, as it involved the acquisition of private land and innovative funding ideas from Supervisor Kenneth Hahn, the Victoria County Golf Course was one of many developed in the Greater Los Angeles area between the 1950s and 1970s. Furthermore, the course is a modest example of municipal golf courses in Los Angeles and has been significantly altered since its original design and construction. Due to a lack of significant associations with events important to history, the subject property does not appear eligible under NRHP/CRHR Criterion A/1.

Criterion B/2: That are associated with the lives of persons significant in our past.

Archival research also failed to indicate any associations with significant persons. For these reasons, the subject property does not appear eligible under NRHP/CRHR Criterion

B/2.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Victoria County Golf Course was designed by renowned golf course designer William F. Bell. Despite its association with this prolific golf course architect, the course has been heavily altered numerous times over the years and no longer retains requisite integrity of Bell's original design. Changes to the irrigation systems, regrading, reseeding, new plantings, and the addition of golf course paths that have altered the original use and traffic patterns within the course, and ultimately compromised the integrity of the course's original design and materials.

Original building plans for the clubhouse building and associated landscape design features indicate that the building was design by architect Edwin H. Ripperdan and landscape designer Edward R. Lowell. Archival research failed to indicate any significant works by either designer; therefore, it appears that neither designer was a master architect or important creative individual. The building also represents a modest example of the Mid-Century Modern style of architecture and does not serve as a significant example of the style. With regards to the clubhouse complex, there is evidence of significant roof changes, replacement doors, replacement windows, reconfiguration of openings, infill openings, and landscape design changes. In addition, Outbuildings 1 and 2 have been significantly altered over the years, including replacement windows and the reconfiguring of openings. For all of these reasons, the subject property does not appear eligible under NRHP/CRHR Criterion C/3.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

The subject property is unlikely to yield any information important in prehistory or history and therefore does not appear eligible under NRHP/CRHR Criterion D/4.

Integrity Considerations

Since the initial development of the subject property as the Victoria County Golf Course, the property's location has remained unchanged, always located on a large parcel and functioning as a municipal golf course. When the golf course was developed, the surrounding area was already developed and appears to maintain a similar level of development today; therefore, the subject property retains integrity of setting. However, the course and the clubhouse complex have experienced significant alterations since original construction that have compromised the integrity of design, materials, and workmanship. With regards to the clubhouse complex, there is evidence of significant roof changes, replacement doors, replacement windows, reconfiguration of openings, infill openings, and landscape design changes. Therefore, the clubhouse complex does not retain the requisite integrity of design, materials, and workmanship. These alterations have also diminished the feeling and association of the clubhouse complex. In addition to the alterations to the clubhouse complex, outbuildings 1 and 2 have been significantly altered over the years, including replacement windows and the reconfiguring of openings.

The integrity of the golf course is also part of the subject property's overall integrity. The course was originally designed by renowned architect William F. Bell, but was significantly altered multiple times over the years starting in the 1970s with work on

specific fairways, renovation of the front nine holes, new irrigation systems, and the construction of additional paths. While these changes were significant to the overall design of the course, it was not until the late 1990s that the entire course was redesigned by Casy O'Callaghan. During the 1990s renovations, the course was regraded; fill dirt was added to elevate the course an average of 2 feet; new irrigation systems were added; 500 trees were planted on the site; new drainage systems were put in place; and alterations were made to the greens and the sand bunkers. Therefore, the 1970s renovations combined with the 1990s renovations have significantly altered the design, materials, workmanship, feeling, and association.

In summary, alterations to the subject property buildings and golf course have significantly compromised the integrity of the subject property, and it appears ineligible under all applicable designation criteria.

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APPENDIX F

Geotechnical Study

GEOTECHNICAL STUDY
IN SUPPORT OF EIR

for

Carol Kimmelman Athletic and Academic Campus
Carson, California

Prepared For:

The Carol Kimmelman Center, LLC.
2121 East 7th Place
Los Angeles, CA 90021

Prepared By:

Langan Engineering and Environmental Services, Inc.
515 South Flower Street, Suite 2860
Los Angeles, California 90071

23 April 2019
Langan Project No. 700060401

LANGAN

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1.0 INTRODUCTION

Langan Engineering and Environmental Services, Inc. (LANGAN) has prepared this report at the authorization of The Carol Kimmelman Center, LLC to provide geotechnical analysis in support of an Environmental Impact Report (EIR) for the proposed Carol Kimmelman Athletic and Academic Campus (Project) at 340 Martin Luther King Jr. Street, Carson, California.

Provided herein is a brief site description, a description of the proposed project, an overview of available geotechnical information, and preliminary geotechnical analysis for the proposed structures and athletic fields. As discussed in more detail, a building-specific geotechnical investigation should be performed as part of the building permit phase to confirm the preliminary geotechnical concepts presented in this report for the specific structure(s).

2.0 PROJECT OVERVIEW

2.1 Site Description

The Project area is approximately 87 acres (Site) of the northeastern portion of the existing approximately 187 acre Victoria Golf Course. The County of Los Angeles (County) owns the Site, which the County currently leases for the operation of a golf course. Prior to the Victoria Golf Course's current use as a County golf course, it was the site of a portion of the former Ben K. Kazarian (BKK) landfill, which operated as a Class II municipal solid waste landfill from 1948 to 1959. The California Department of Toxic Substances Control (DTSC) is overseeing the former landfill's remediation. The entire former landfill site is divided into Operable Units (OU) focused on two separate remediation operations, of which the Victoria Golf Course site is OU-2. Refer to Figure 1 for a site vicinity map.

2.2 Proposed Development

The Project involves the redevelopment of the Site for public recreation purposes. Project components would include a tennis center, soccer center, learning center and various support buildings. Features of the Project include:

Tennis Center:

- The tennis center component would occupy approximately 28 acres developed with a 23,000 square foot welcome center, a spectator venue with up to 12 hard courts and 1,200 seats, 50 tennis courts of various sizes, a 5,000 square foot administration building, a 13,000 square foot player development building, and outdoor training spaces including a 100-meter sprint track, basketball courts, a training turf, a maintenance facility, and vehicle/ bus parking.

Learning Center:

- Adjacent to the tennis center would be an approximately 25,000 square foot learning center that would include classrooms, quiet rooms, staff support for homework, counseling, and tutoring.
- The welcome center and learning center will be located in the main entrance area within the northern portion of the Site.

Soccer Center:

- The soccer center component would occupy approximately 58 acres developed with eight full-sized grass soccer fields and two multi-purpose fields.

Other Improvements:

- Additional site improvements would include asphalt paved parking lots and two additional overflow parking areas between the fields and South Avalon Boulevard.
- Miscellaneous support buildings, including maintenance facilities, restrooms, and sheds, will be constructed throughout the Site.

Based on preliminary conceptual designs, the foundations for the tennis courts and soccer fields would consist of:

- The hard tennis courts will likely be built on post-tensioned slabs. Clay courts typically consist of a minimum 1-inch-thick fast-dry surface material over minimum 4-inch stone on a compacted subgrade. The tennis courts are assumed to have four 25-foot tall light poles on each side of the courts, with 35-foot-high light poles at the exhibition courts.
- Natural and synthetic-turf fields may be developed. The natural-turf fields would be expected to consist of a 12- to 18-inch section including about 10-inches of root-zone soil mix overlying a minimum of 4 inches of course gravel layer. Perforated pipes would be installed in a network of gravel-filled trenches beneath the course gravel layer. The artificial pitch would consist of synthetic turf over a layer of crumbled rubber or sand and rubber infill. Beneath the infill is a 6-inch aggregate layer (permeable rock). A network of perforated PVC pipes would be installed in gravel-filled trenches beneath the aggregate layer. Per FIFA regulations, the natural turf would be placed fairly flat, and the "cultivation and laser grading within the soil profile may be acceptable when the grades vary up to about +/- 50 mm." The soccer fields would have approximately six 60-foot-tall light poles for up to five fields.

3.0 AVAILABLE INFORMATION REVIEW

3.1 Document Review

LANGAN reviewed reports, maps and other public available information from the United States Geological Survey (USGS), California Geological Survey (CGS), City of Carson, Federal Emergency Management Agency (FEMA), California Division of Oil, Gas, & Geothermal Resources (DOGGR), Los Angeles County Department of Public Works (DPW's) and Department of Toxic Substance Control (DTSC). A summary of the available information reviewed is provided below.

3.2 Site Development History

Prior to 1947, the Site was a low-lying land referred to as Dominguez Slough, Dominguez Lagoon, Laguna Dominguez, Laguna Dominguez Slough and Garden Valley Slough. Historical topographic maps indicate that the ground surface formerly ranged from about el 26 (elevation in feet above mean sea level) in the northwest corner to about el 10 near the center of what would become a landfill. The Site was transected by a number of 200 to 500 feet wide drainage channels.

The June 2014 report titled Final Remedial Investigation and Feasibility Study for Soil and Soil Gas Media by Leighton Consulting (RI/FS report) states the land was leased for use as a municipal and industrial waste landfill from 1948 to 1960. Landfilling consisted of excavation to about el 1 to 2 (a depth of about 8 to 25 feet), and placement of refuse and liquid waste in a series of trenches separated by haul roads. The historical data in the RI/FS report provides the following description:

> *"The predominance of trenches appear to have been about 30 to 50 feet wide and up to several hundred feet long. Some of the trenches are over 200 feet wide and one was over 1,400 feet long ... Analysis of the topography of the northeast quadrant (of the Victoria Golf Course) suggests that for the more numerous trenches, the width is on the order of 40 to 50 feet with at least an 8 to 10-foot wide "spine" (of natural ground) left between adjacent trenches. This is reflected by the hill-and-valley topography across the driving range and the 4th and 9th fairways."*

The County of Los Angeles planned and built the Victoria Golf Course between 1962 and 1966. Differential settlement from the refuse was reported in a 1977 letter from the County of Los Angeles, Department of Park and Recreation to the Acting County Engineer. The letter reports uneven and "uncontrolled subsidence" within the Victoria Golf Course resulting in damage to irrigation systems and elimination of surface drainage.

In 1992, a topographic survey was performed at Victoria Golf Course for the County of Los Angeles. The topographic survey depicted settlement that was causing ponding of water and breakage of irrigation pipes. The differential settlement pattern reportedly followed the orientation of landfill trenching that was apparent from interpretation of historical aerial photographs. In December 1998, a grading plan for the refurbishment of off-site Cricket Fields (adjacent to the northwest end of the Project) indicated that 352,220 cubic yards of soil (up to one foot of soil cover) was added to the field to correct differential settlement.

3.3 Site Reconnaissance

A field reconnaissance was conducted on 30 July 2018 by LANGAN personnel and a Los Angeles County representative. The assessment of the Site, adjacent and surrounding properties was limited to identifying, if possible, any indications of settlement or collapsing soils, noting the general condition of the existing sidewalks and buildings, identifying existing utility lines, and noting the general description of adjacent streets and surrounding properties.

The concrete golf cart paths and maintenance area walls within the limits of the Site generally showed minor or no cracks. Evidence of concrete cracking or settling was noted in areas including part of the golf cart paths on the east side of the Site, parallel to South Avalon Boulevard; on the golf cart paths north side of the Site; north and east of the driving range; and on part of a concrete path that traverses the Dominguez Branch Channel in northwest side of the Site. Per discussions with the golf course facility staff, the concrete cart paths were installed approximately 8 to 10 years ago and the soil at the driving range was excavated approximately 2 to 3 years ago to plant new grass. The facilities staff noted that with the exception of the field at Hole 15 on the western side of the golf course, the grass within the golf course does not grow well. The facilities staff also noted that the field at Hole 13, on the south end of the existing golf course, was particularly more prone to flooding after a heavy rain compared to other parts of the course.

Evidence of settlement was also noted from cracks and differential movement along Martin Luther King Jr. Street north of the Site. Across from the golf course, evidence of settlement at Victoria Park was observed from tilting and exposed light pole foundations.

3.4 Regional Geology

The Site is located in the northern portion of the Peninsular Ranges geomorphic province, which extends from the Los Angeles Basin south of the Santa Monica Mountains to the tip of Baja

California. The province is made of elongated northwest trending mountain ranges, separated by straight sided sediment floored valleys. Geologic units of the province consist of Jurassic and Cretaceous age basement rocks, overlain by an estimated 32,000 feet of marine and non-marine sedimentary strata, from the late Cretaceous to Holocene epochs (City of Carson, 2004).

3.5 Geologic Hazards Review

Our geologic hazard review was performed in general accordance with CGS Special Publication 117A, "Guidelines for Evaluating and Mitigating Seismic Hazards in California." The following subsections present the results of our review of the potential geologic hazards as they pertain to the Site.

- Regional Faulting – Recognized and mapped faults within a 100-kilometer (km) radius of the Site based on the CGS "2010 Fault Activity Map of California" (Fault Activity Map) and "An Explanatory Text to Accompany the Fault Activity Map of California" (Explanatory Text) are shown in Figure 2A and Figure 2B, respectively.

  Additionally, according to a search of the USGS 2008 California Seismic Source Model within 20 miles (32 km) of the Site, the closest known active faults capable of producing the strongest ground shaking at the Site are the Newport-Inglewood Faults approximately 1.5 miles (2.5 km) east of the Site; the Palos Verdes Fault approximately 5.7 miles (9.1 km) southwest of the Site; the Puente Hills Faults approximately 8.3 to 13.4 miles (13.3 to 21.6 km) northeast and east of the Site; and the Elysian Park (Upper) Fault approximately 14.9 miles (23.9 km) north of the Site. Refer to Appendix A for a summary of USGS 2008 California Seismic Sources, including individual fault segments and fault segment combinations along with closest rupture distances from the Site to the fault, mean characteristic moment magnitudes for each fault segment, slip rate, and fault length for individual fault segments.

- Regional Seismicity – A search of the CGS earthquake catalogue using the computer program *EQSearch* found 66 earthquakes with magnitude 5.0 or greater have occurred within a 100-km radius of the Site since 1800. In addition, a search of the USGS ANSS Comprehensive Earthquake Catalog (ComCat) using a web-based Earthquake Archive Search and URL builder tool, found that as of 18 July 2018, 33 earthquakes with magnitudes between 5.0 or greater have occurred within a 100-km radius of the Site since 1900. A summary of the *EQSearch* and USGS ANSS ComCat reported earthquake events are provided in Appendix A.

- Surface Rupture – The Site is not within a mapped Alquist-Priolo (AP) Earthquake Fault Zone as defined by the AP Act, as shown in Figure 3. Geologic review does not indicate the presence of active surface faulting within or adjacent to the Site.

- Liquefaction – Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium-dense sand and gravel, and low-plasticity silts below the groundwater table. According to the CGS, the Site is within a mapped, currently established liquefaction-potential investigation zone, as shown in Figure 3.

- Historical High Groundwater – Based on the SHZR 035, the historically highest groundwater at the Site is about 10 to 20 feet below ground surface, as shown in Figure 4. As noted above, the presence of groundwater may increase the susceptibility to liquefaction for loose to medium granular soils and low-plasticity silts when subjected to sufficient ground shaking. The Department of Water Resources shows a well approximately 1.5 miles southeast of the Site with groundwater depth measurements from 2014 to 2018 and it shows groundwater at an approximate depth of 65 feet.
- Landslides – According to the CGS and SHZR 035 Landslide Inventory, the Site is not within a mapped Earthquake-Induced Landslide Hazard Zone or a mapped landslide area, as shown in Figure 5.
- Seismic-Induced Ground Deformations – Seismic-induced ground deformations include ground-surface settlement, differential settlement and lateral spreading resulting from liquefaction and cyclic densification of unsaturated sands and gravels. The Site is mapped within a liquefaction potential investigation zone and is underlain by a landfill; therefore, differential seismic-induced ground deformations are expected.
- Lateral Spreading - Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. The surficial blocks are transported downslope or in the direction of a free face, such as a slope, by earthquake and gravitational forces.
- Flood Mapping – According to the City of Carson's Safety Element, the Site is not within a mapped 100-year flood zone, as shown in Figure 6. Based on the FEMA Flood Insurance Rate Map Number 06037C1935F (26 September 2008), the Site is partially in an area determined to be outside the 0.2 percent annual chance floodplain, and partially inside an area of 0.2 percent annual chance flood; 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and protected by levees from 1 percent annual chance flood, as shown in Figure 7. Because of the Site's relative proximity to the Dominguez Branch Channel with special flood-hazard areas, it may be subject to flooding if flows exceed the channel design levels.
- Tsunami and Seiche – According to information and maps available from the California Department of Conservation, the Site is not within a mapped tsunami inundation- hazard zone, as shown in Figure 8.
- Subsidence – Land subsidence may be induced from withdrawal of oil, gas, or water from wells or from settlement of the landfill. According to a search of the DOGGR Well Finder online tool, no active oil, gas, or geothermal wells are mapped within the Site. According to our review of the available information from DOGGR, the Site is not considered to be subject to land subsidence from oil, gas, or water withdrawal from oil wells.
- Methane – According to the DPW's Solid Waste Information Management System, the Site is within the methane-producing BKK Landfill. Methane mitigation system may be required for enclosed, habited structures.

3.6 Available Document Information

The following table summarizes reports that were reviewed by LANGAN and that pertain or are in proximity to the Site:

Document	Summary of Document Findings
Leroy Crandall and Associates (1976), Report of Foundation Investigation Proposed Blimp Hangar and Administration Building Goodyear Blimp Base 19200 Main Street Carson, California dated 21 December 1976	Leroy Crandall and Associates performed a foundation investigation for a blimp hangar and administration building approximately 200 feet northwest of the Site on November and December 1976. The foundation investigation consisted of nine bucket-auger borings. Two borings were drilled to a depth of 15 feet in the location of a proposed administration building, and seven borings were drilled to a depth of 24 to 66 feet at a proposed hangar location. Fill was encountered to a depth of 3 to 6 feet and consisted of silty clay, silty sand, silt and clay. Waste was encountered from a depth of 3 to 25 feet. Native material was encountered beneath fill or waste and consisted of clay, silt, silty sand, and sand. "Water seepage" was encountered at depths of 16 to 28 feet. Groundwater was encountered at depths of 34.5 to 48 feet. Shallow foundations were recommended for the proposed administration building with an allowable bearing of 3,000 pounds per square foot (psf). Driven piles were recommended through existing fill, waste and into native material for support of the blimp hangar.
H.V. Lawmaster & Co., Inc., (1978), Foundation Investigation Report, Proposed Storage Building, Los Angeles Blimp Base, Main Street, North of San Diego Freeway (I-405), Carson, California, dated 8 May 1978	H.V. Lawmaster performed a field investigation in April 1978 for a one-story steel frame building approximately 200 feet northwest of the Site. The field investigation consisted of drilling four bucket-auger borings to a depth of 10 to 31 feet. Waste was not encountered in any of the borings. Fill was encountered in one boring to a depth of 10 feet and consisted of sandy clay and silt with organic matter. Native material was described as silty clay, clayey silt with various amounts of sand. Fine sand was encountered from 25 to 30 feet. Shallow foundations were recommended with an allowable bearing capacity of 2,000 psf. Coarse aggregate and perforated pipes were recommended below the floor slab as a methane mitigation system.
H.V. Lawmaster & Co., Inc., (1978), Project: Proposed New Storage Building, Los Angeles	H.V. Lawmaster performed a field investigation in May and June 1978 to

Blimp Base, Carson, California, Subject: Delineation of Dump Site, dated 24 May 1978	delineate waste approximately 200 feet northwest of the Site. The field investigation consisted of three borings and seven test pits. Borings were drilled to a depth of 16 to 25 feet. Test pits were excavated to a depth of 10 to 14 feet.
H.V. Lawmaster & Co., Inc., (1983), Re; Results of Soil Borings and Tests at Goodyear Airship Operations Center, Carson, California, dated 23 May 1983	H.V. Lawmaster performed a field investigation in May 1983 approximately 200 feet northwest of the Site. The field investigation consisted of drilling two bucket-auger borings to a depth of 25 feet. The first boring encountered fill to a depth of 23 feet followed by "natural" soil. Fill was described as clayey sand, clay and silt with small wood particles and [gaseous] odor. Native material was described as clayey sand with silt and sandy clay. The second boring encountered fill to a depth of 8 feet, waste from 8 to 24 feet, and natural soil from 24 to 25 feet. Fill was described as silty clay and clayey sand. Native material was described as silty clay.
Ecology and Environmental, Inc., (1994), CERCLA Screening Site Inspection, Field Investigation Team Zone II, Appendix D, Site Reconnaissance Interview and Observation Report, dated 23 April 1994	A review letter regarding subsidence at the Victoria Golf Course states that three feet of fill material was placed over the entire site to meet the conditions of an Industrial Waste Permit. The letter states that major decomposition and settlement occurred within one year of placement. Golf course irrigation required to keep the grass and vegetation in an acceptable condition was described has having an effect on the decomposition rate and settlement of the landfill. A site reconnaissance by Bechtel Environmental, Inc., of the Victoria Golf Course reported that the Victoria Golf Course has exhibited land subsidence with ground levels differing by 2 to 5 feet in certain areas creating swales for hundreds of yards. The land subsidence appeared to trend in the direction in which trenches were excavated. An average of 3 feet of fill material was placed on top of the BKK Landfill as a cap. Drainage ditches had been constructed throughout the golf course however subsidence had

	rendered nearly all of them non-functional. Water ponding was observed in the southeastern portion of Victoria Golf Course with diameters ranging from 1 foot to 30 yards.
Applied Geosciences, Inc., (1995), Environmental Considerations for Improvements, Victoria Golf Course, 340 East 192nd Street, Carson, California, dated 20 March 1995	Plate A – Landfill History shows limit of wastes for different years including 1952, 1956, 1957, 1958 and 1966. The limits of wastes generally encompass the entire Site with the exception of the northern portion and some areas that extend into the Site on the east.
ATC Environmental, Inc., (1996), Draft Focused Environmental Impact Report, Victoria County Golf Course, Section 3.0, Discussion of Environmental Issues, dated 14 August 1996	The report states that the amount of subsidence at the Victoria Golf Course ranged from inches to several feet. Subsidence in the northeast quarter was from 4 to 5 feet. Most prominent subsidence was located in the northeast quadrant where closely spaced, narrow waste filled trenches were created. The linear gully-like features were evident in other areas with orientations dependent upon the underlying trenches. Erosion and down cutting in the landfill cover was evident in the northeast. Landfill materials were anticipated to reach a maximum depth of 20 feet because excavations were stopped at 0 to 2 feet above mean sea level (msl) and the top of trench fill was at 20 feet above msl. DTSC personnel noted that the depth to the trash base ranges from 25 to 30 feet and trash thickness averages around 20 feet. The report states that data indicating refuse has been encountered up to 30 feet suggests that some excavations extended to 10 feet below msl. The thickness of soil cover was unknown however the landfill permit required 2 feet of soil cover while the County of Los Angeles reported that trenches were topped off with enough cover (3 feet) to prevent odor, infiltration, and vectors. The report concluded that ultimate settlement potential for soil cover is 20 percent of original thickness and 30 to 50 percent of original

	thickness for waste material. It was assumed that landfill trenches were 20 to 30 feet deep with ultimate settlement of 6 to 15 feet. It was also assumed that cover soil with a thickness of 0 to 20 feet would have an ultimate settlement of 5 feet. The range of potential ultimate settlement for any given area should be 6 to 20 feet. Observations indicate that approximately 2 to 10 feet of subsidence has occurred at various locations and therefore 4 to 10 feet of potential subsidence remained. The report states "other studies" indicate that the rate of settlement is approximately 1 percent of total fill thickness per year. The rate is assumed to apply from mid-point of operations (estimated as 1955) and applied to a range of trash and soil thickness of 20 to 50 feet. Figure 3.1-2 – Boundaries of Landfilling Activity between 1951 and 1958 appears to show the limit of wastes to generally encompass the entire Site with the exception of the northern portion and some portions of the east.
Hushmand Associates, Inc. (Hushmand), (2006), "Geotechnical Evaluation of Concrete Pad and Caissons Used for Anchoring of Goodyear Blimp, Gardena, Los Angeles County, California (Revision 1), dated July 2006.	Hushmand performed a field investigation in December 2006 approximately 200 feet northwest of the Site to evaluate a circular concrete pad supported with caissons. The field investigation consisted of hand-augering four borings to a depth of 6 feet. Dense, silty clayey sand was encountered to a depth of 3.5 feet and stiff lean clay from 3.5 to 6 feet. The circular concrete pad was supported by square caissons with dimensions of 3.25 feet for depth, 3.25 feet for length and width; however, the existing caissons were replaced with new caissons with the same dimensions.
Leighton Consulting, Inc., (2014), "Final Remedial Investigation and Feasibility Study for Soil and Soil Gas Media, Former BKK Landfill, Carson Dump Operable Unit 2, City of Carson, California," dated 10 June 2014.	Leighton performed a field investigation between December 2006 and October 2007 at OU-2 to characterize the hydrogeologic setting, soil and soil gas. The field investigation consisted of pushing 74 Cone Penetration Tests (CPTs), drilling 3 coreholes, installing 22 groundwater wells, installing 75 soil-gas wells, and drilling 234 soil borings

	using direct-push equipment (geoprobes). Depth of soil cover was approximately 2 to 15 feet (el 27.5 to 11.5). Depth to the bottom of waste was encountered from approximately 10.5 to 36.5 feet (el 15.5 to -4.5 feet). Encountered waste thickness was from 1 to 25 feet, and groundwater depth was from 9 to 43 feet (el 7 to -16 feet).
Burns McDonnell, (2016), "Remedial Action Plan for Soil and Landfill Gas Media, Former BKK Landfill, Carson Dump, Operable Unit 2, 340 East 192nd St., 19202 South Main St., 19200 South Main St., City of Carson, California 90248" dated June 2016	Burns McDonnell performed a field investigation between December 2006 and August 2008 at OU-2 to define the nature, magnitude and extent of potentially hazardous substances. The field investigation consisted of drilling three stratigraphic boreholes, 123 direct-push borings, pushing 74 CPTs, installing 22 groundwater monitoring wells and 75 soil-gas probes. The depth to the top of the waste zone was from 1.5 to 15 feet (el. 27.5 to 11.5 feet) and the base of the waste zone was from 10.5 to 36.5 feet (el. 15.5 to 4.5 feet). The volume of waste was estimated as 4.356 million cubic yards and was reported as mixed with soil. The percentage of soil versus waste was assumed as 20 percent soil and 80 percent waste.

4.0 GEOLOGIC HAZARDS AND MITIGATION FINDINGS

4.1 General Subsurface Conditions

Based on the available information, the Site is underlain by 1.5 to 15 feet of soil cover (el 27.5 to 11.5 feet) consisting of sandy silt, clayey sand, sandy clay and clay with the predominant soil type as sandy clay. The RI/FS report concluded that the existing soil cover, if monitored and maintained, can be an effective cap for lateral and vertical containment of waste materials. Waste material underlies the soil cover and the depth to the bottom of the waste ranged from 10.5 to 36.5 feet (el 15.5 to -4.5) with thickness ranging from approximately 1 to 25 feet. The RI/FS report described waste material as wood, glass, brick, paper, straw, cardboard, concrete, rubber, wire cable, asphalt, metal, plastic and fabric fragments with stained black/brown/gray soil. The RI/FS reports that native soil underlies fill in the northern portion of the Site and underneath waste material where waste material was encountered. The BKK landfill predates the use of engineered liners and therefore a liner was not encountered beneath the waste. The depth of fill in the northern portion was not reported however the depth to native soil beneath waste material was reported as 10.5 to 36.5 feet (el 15.5 to -4.5 feet). Native soil was described as sandy silt, sandy clay, clay and fat clay. Groundwater was reported at a depth from 9 to 43 feet (el 7 to -16 feet).

Differing information regarding the limits of the former landfill has been found in available literature. Figures prepared by the Department of Water Resources and Bryan A Stirrat and Associates dated June 1988 show the limit of waste at Victoria Golf Course appears to include the southern portion of the Site with the north and northwestern portion excluded from the limit of waste. The RI/FS report shows the limit of waste includes most of the southern and northwestern portion of the Site and excludes the northern, parts of the eastern and southeastern portions of the Site. Figures prepared by Applied Geosciences, Inc., and ATC Environmental, Inc., show the limit of wastes generally encompass the Site with the exception of the northern portion and some areas on the east. The figures are attached in Appendix B.

4.2 Seismic Hazard

The Site is in a currently established seismically active area that has historically been affected by generally moderate to occasionally high levels of ground motion. Because of the Site's proximity to several nearby active faults, moderate to strong ground shaking could occur from an earthquake on any nearby fault. Seismic ground shaking has the potential to significantly impact the Project. Compliance with applicable building code requirements would reduce the potential for structures on the Site to sustain significant damage during an earthquake event and reduce impacts related to ground shaking to less than significant.

Based on the geologic and special studies zone map review, an indication of active faulting within or adjacent to the Site is not shown, therefore surface rupture is anticipated to have a less than significant impact on the Project.

Based on the historical high groundwater and CGS, liquefaction potential at the Site should be evaluated and mitigation measures, as required, should be implemented, as necessary, based on the design geotechnical investigation for the applicable structures. In areas of high liquefaction potential, mitigation could include ground improvement or deep foundations extending through the potentially liquefiable soils and structurally-supported floor slabs for buildings. In areas of moderate liquefaction potential, mitigations could include special foundation design procedures, such as extra reinforcement and strengthening of building foundations and floor slab systems. Areas with low potential for liquefaction may not require any specific foundation treatment or ground improvement. Liquefaction has the potential to significantly impact the Project. With site-specific liquefaction hazard studies and applicable liquefaction mitigation, impacts related to liquefaction would be reduced to less than significant. The Dominguez Channel is approximately 500 feet from the Site and the adjacent creek has an invert above the potential liquefiable soil, therefore the potential for lateral spreading is expected to be low.

According to the CGS, no earthquake induced landslide investigation zones or landslides are mapped within the Site. Landslides are anticipated to have a less than significant impact on the Project.

The Site is within a mapped liquefaction potential investigation zone and is underlain by a landfill; therefore, differential seismic-induced ground deformations are anticipated. Potential ground deformations should be mitigated at Project building areas; the mitigations should be developed based on the design geotechnical report, but could include ground improvement such as dynamic compaction, pile support of structures, use of mat foundations or stiffened slabs, etc. With site-specific geotechnical studies and applicable mitigations in compliance with applicable building code requirements, impacts related to liquefaction would be reduced to less than significant.

4.3 Expansive Soils

Based on the review of geotechnical reports for adjacent sites, summarized in Section 3.6, laboratory results for surficial soils had a very low to low expansion potential. Laboratory testing should be performed as part of the geotechnical investigation to confirm the expansion potential of surficial soils. Expansive potential soils are anticipated to have a less than significant impact on the Project.

4.4 Soil Corrosion

Based on the review of geotechnical reports for adjacent sites, summarized in Section 3.6, laboratory results for surficial soils had a low to moderate water-soluble sulfate concentration. However, since this site is a former landfill, the subsurface materials could be corrosive to concrete and ferrous metals. Laboratory testing should be performed as part of the geotechnical investigation to confirm the corrosive potential of surficial soils and subsurface soils that will be in contact with site element foundations. The mitigation of corrosive soils could include use of specific types of pipe, insulation, coatings, and cathodic protection or concrete admixtures. Corrosion potential soils are anticipated to have a less than significant impact on the Project if mitigated through site specific testing and design in accordance with American Concrete Institute and Caltrans Corrosion Design Standards.

4.5 Sedimentation and Erosion

The Site should be graded to ensure positive drainage away from the locations of the proposed development. Proper drainage should be maintained at all times.

Ponding or trapping of water in localized areas can cause differing moisture levels in the subsurface soil. Erosion protection and drainage-control measures should be implemented for construction during inclement weather. During rainfall, backfill operations may need to be restricted to allow for proper moisture control during fill placement. With compliance with applicable building code requirements, sedimentation and erosion are anticipated to have a less than significant impact on the Project.

4.6 Oil Wells and Methane Gas

According to a search of the DOGGR Well Finder online tool, no active oil, gas, or geothermal wells are mapped within the Site. The Site is a former landfill, so a methane mitigation system may be required for enclosed, habited structures. With compliance to applicable County requirements for building mitigation systems, impacts related to methane gas would be less than significant.

4.7 Settlement

The soil fill and the landfill material underlying the site have been placed in a heterogeneous manner and could experience additional differential settlement due to the variable and compressible nature of the material. The amount of settlement expected from the landfill is highly variable and is a function of the depth, type of waste, age of the waste, organic content and water content of the material disposed of. This landfill is fairly mature, and based on the historic data, a significant amount of settlement (up to 10 feet reported) may have already occurred from decomposition. Due to the way the landfill was constructed, larger differential settlements could be anticipated between the areas underlain by landfill material and those underlain only by soils. The landfill operations in this area reportedly stopped in 1960; therefore, the material has been decomposing for over 58 years. Based on the age of the landfill, the

primary settlement of the waste is expected to have occurred; however, additional decomposition (and associated settlement) is anticipated to occur over the life of the Project. Based on LANGAN's conceptual rough grading plan, after ground improvement, additional fill (up to 7 feet) is anticipated to be required to meet grade in some portions of the Site. The load from the new fill is anticipated to cause additional settlement. Structures located over the landfill may require deep foundations extending through the landfill. Downdrag loads resulting from decomposition and settlement of the landfill would be added to the design loads for the piles.

5.0 PRELIMINARY EVALUATION

Proposed structures outside the limits of waste are anticipated to be supported on shallow foundations and slab-on-grade. For structures proposed within the limits of waste, deep foundations that bypass the waste and founded in the native soil could be used. Considering the reported waste thickness, existing and proposed additional soil cover, the piles would need to be embedded in native soils that reportedly exist about 10 to 35 feet below future grade.

The proposed fields and tennis courts are lightly loaded, so typically they would be expected to be supported on improved subgrade as long as some future settlement of these areas would be considered acceptable. With ground improvement consisting of dynamic compaction (DC), the tennis courts could be supported on a mat foundation to reduce differential settlements between areas underlain by landfill material and area not underlain by landfill material. Alternatively, the tennis courts could be supported with post-tension structural slabs spanning between pile-supported grade beams. Support of natural fields would not need ground improvement, however more frequent maintenance may be required.

Proposed light poles can be supported on individual piles or on the court mat with ground improvement. Proposed hardscape (sidewalks, paved parking) could be supported on improved ground. Proposed utilities are expected to be supported on improved ground or structurally supported.

5.1 Seismic Design

Seismic design of structures can be designed in accordance with the provisions of ASCE/SEI 7-10 and 2016 California Building Code. Based on the available subsurface information, and in accordance with the seismic provisions of these codes, the following preliminary seismic design parameters are recommended for structures outside the limit of waste:

- Mapped Spectral response accelerations S_S and S_1: 1.627g and 0.605g, respectively.
- Site Class D
- Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration parameters at short periods, S_{MS}, and at one-second period, S_{M1}: 1.627g and 0.907g, respectively.
- Design Earthquake (DE) spectral response acceleration parameters at short period, S_{DS}, and at one-second period, S_{D1}: 1.085g and 0.605g, respectively.
- MCE_R Design Peak Ground Acceleration (PGA_M) of 0.614g.

MCE_R = Risk-Targeted Maximum Considered Earthquake

The limit of waste is classified as Site Class F and seismic design of buildings within the limit of waste will require a site specific response analysis.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 Site Preparation

Prior to work on the Site, the landscaping, utilities and structures for the Victoria Golf Course will need to be removed and disposed of in accordance with state and local regulations. Removal of the soil cover should be limited to reduce the potential to expose landfill refuse. Prior to mobilization of ground improvement equipment, the site should be graded and proof rolled as necessary to prepare a working surface for construction equipment.

6.2 Ground Improvement

Dynamic Compaction is a ground improvement method for densifying soils, particularly in sites with old fill and landfills. One of the primary targets for dynamic compaction is to reduce differential settlement that potentially can occur. Generally the setup for this method involves a crane capable of lifting large tampers, formed from steel and/or concrete, and then dropping the weight in a specified grid pattern. Depending on the size of the crater created from dropping the tamper, additional passes over the grid may be required.

Depths of improvement vary depending on subsurface conditions and equipment used. Ground improvement grids should extend a minimum of 5 to 10 feet beyond the proposed improvement footprint. Depending on the drop weight used, subsurface improvements can range from 10 to 30 feet generally with improvements at greater depths depending on the number of passes, weight of tamper, and pre-determined grid setup. Crater depths of varying thickness are created as the weight is dropped. The craters will need to be filled in with compacted soil.

The most common techniques used for confirmation of ground improvement following DC verification include in-situ density using Standard Penetration Test (SPT) and Cone Penetrometer Testing (CPT). The verification test should include in-situ testing prior and after dynamic compaction. If the above verification methods prove unreliable or not feasible, onsite plate load testing after ground improvement can be performed to estimate bearing capacity and settlement.

6.3 Fill Material and Compaction Criteria

Soil fill should be placed over 3 percent of their optimum moisture content, and compacted to the following maximum dry density in accordance with ASTM D1557 (Modified Proctor): 95 percent on building areas and areas sensitive to differential settlement and 90 percent in other areas.

7.0 DESIGN PHASE STUDIES

At this time, we recommend performing the following studies:

1. A geotechnical engineer should prepare a geotechnical study that complies with all applicable state and local code requirements. Each of the potential geologic hazards described in this report should be addressed, recommendations provided in the design-level report implemented, as necessary. The design-level geotechnical report should include all applicable recommendations in this report. To summarize, the following actions are recommended:
    a. Geotechnical investigation to delineate the lateral and vertical limits of waste, determine the groundwater and native soil depth.
    b. Analyze the potential for liquefaction, settlement, expansive and corrosive soils.

c. Develop precise recommendations for soil improvement and foundation design.
d. As needed, a site specific response analysis and ground motion design for buildings proposed within the limits of waste. Including a geophysical investigation beneath the proposed building footprint to determine the waste characteristics needed for a dynamic analysis.
e. Review structural loading, and confirm or refine preliminary foundation types, bearing capacities, and anticipated settlements.
f. Review of final demolition plans, civil and grading plans, structural plans and loads, perform final foundation analyses, and develop final foundation recommendations.

8.0 LIMITATIONS

This report has been prepared to assist the design of the proposed Project and to support the Environmental Impact Report. The conclusions and recommendations provided in this report are preliminary and based on a "desk study" of information from others, which we have relied upon as being accurate and representative of the conditions at the Site. A design level geologic and geotechnical study (including field and laboratory testing) is recommended to develop formal design and construction recommendations.

9.0 REFERENCES

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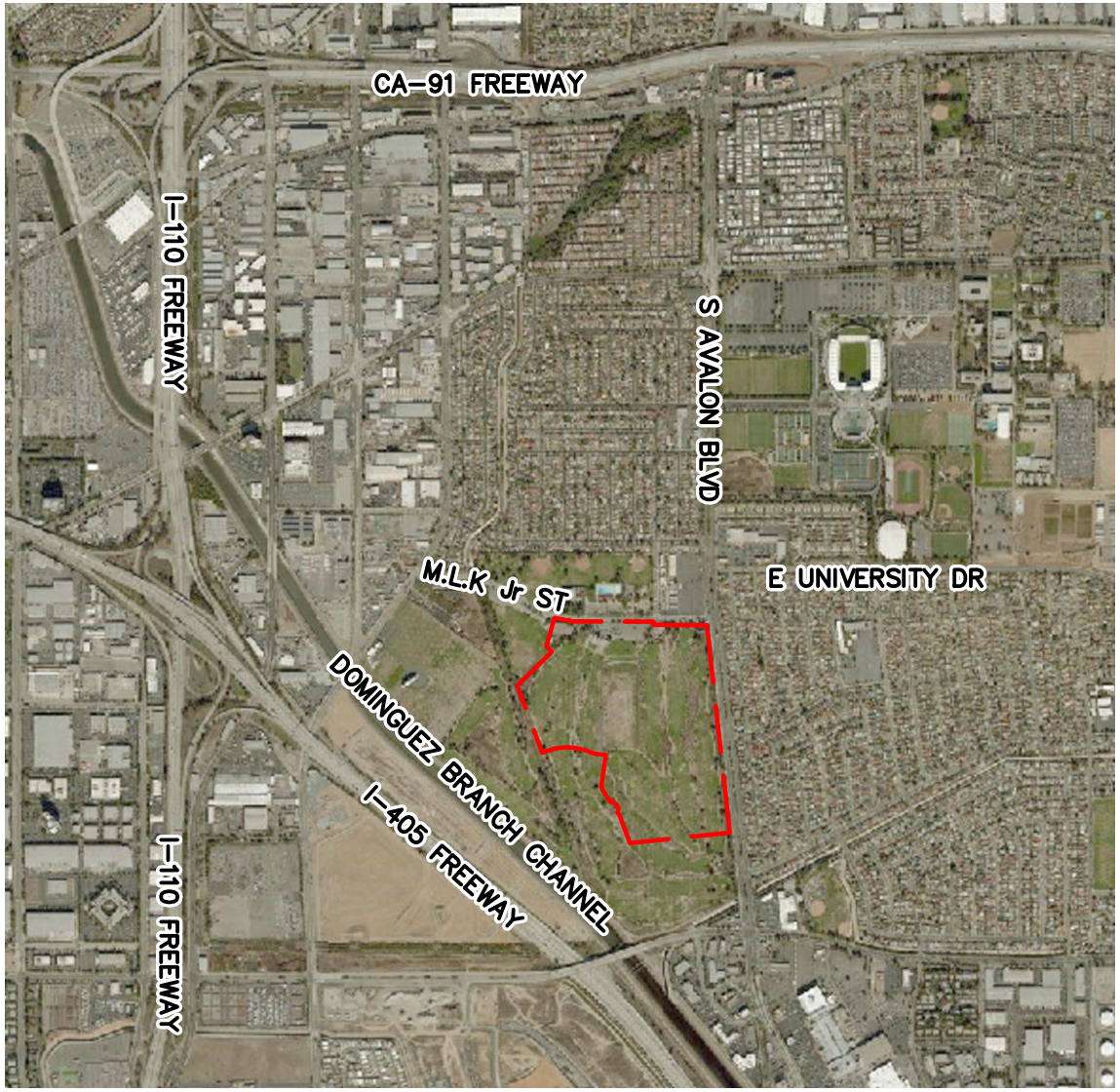
FIGURES



NOTES:

1. BACKGROUND AERIAL IMAGE OBTAINED FROM BING MAPS ON 23 JULY 2018.
2. CONCEPTUAL SITE PLAN AND SITE LIMITS REFERENCED FROM PLAN TITLED, "CONCEPTUAL SITE PLAN & PROGRAM, KIMMELMAN FOUNDATION SPORTS & ACADEMIC COMPLEX, CARSON, CA," PREPARED BY MEIS, DATED 11 JANUARY 2018.

LEGEND:

APPROXIMATE SITE LIMITS

PRIVILEGED AND CONFIDENTIAL - PREPARED AT REQUEST OF COUNSEL

2000 1000 0 2000

SCALE IN FEET

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Figure Title

SITE VICINITY MAP

Project No.	700060401
Date	APRIL 2019
Scale	1" = 2000'
Drawn By	AJT

Figure No. **1**

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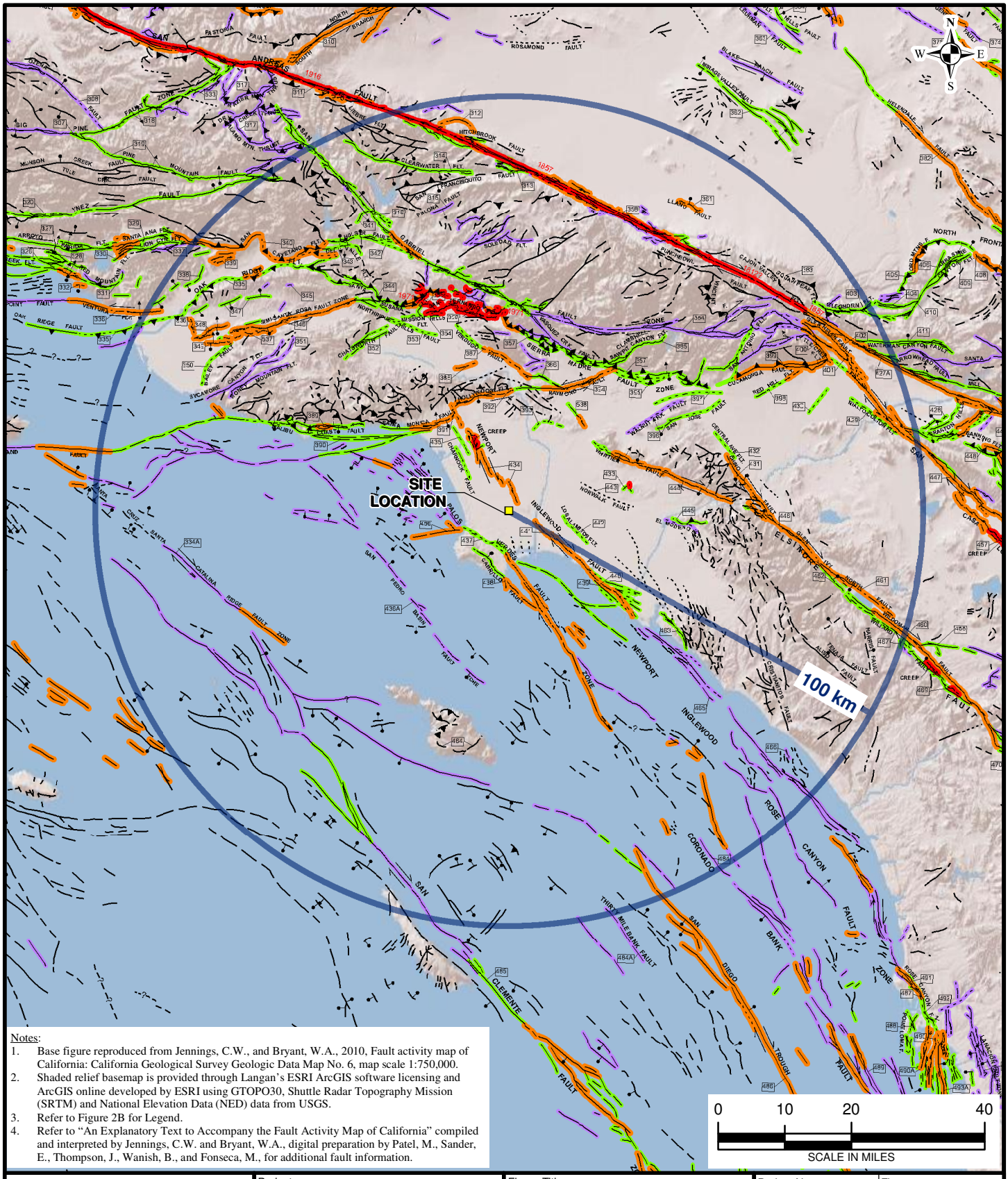
Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\2D-DesignFiles\Geotechnical\700060401 Boring Location Plan.dwg Date: 4/12/2019 Time: 07:24 User: atran Style Table: Langan.stb Layout: SITE VICINITY MAP



Notes:

1. Base figure reproduced from Jennings, C.W., and Bryant, W.A., 2010, Fault activity map of California: California Geological Survey Geologic Data Map No. 6, map scale 1:750,000.
2. Shaded relief basemap is provided through Langan's ESRI ArcGIS software licensing and ArcGIS online developed by ESRI using GTOPO30, Shuttle Radar Topography Mission (SRTM) and National Elevation Data (NED) data from USGS.
3. Refer to Figure 2B for Legend.
4. Refer to "An Explanatory Text to Accompany the Fault Activity Map of California" compiled and interpreted by Jennings, C.W. and Bryant, W.A., digital preparation by Patel, M., Sander, E., Thompson, J., Wanish, B., and Fonseca, M., for additional fault information.

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Figure Title

CGS FAULT ACTIVITY MAP OF CALIFORNIA LEGEND

Project No.	700060401
Date	APRIL 2019
Scale	1 inch = 20 miles
Drawn By	BJS
Figure	2A

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Path: \\langan.com\data\IRV\data4\700060401\Project Data\ArcGIS\MXD\Geotech_Figures\CGS_Fault_Map.mxd Date: 10/18/2018 User: bsaylor Time: 11:11:58 AM

LEGEND:

Site Location

Fault Age

The age classifications are based on geologic evidence to determine the youngest faulted unit and the oldest unfaulted unit along each fault of fault seciton

- Historic
- Holocene
- Late Quaternary
- Quaternary
- 100 km

Pre Quaternary Faults

- fault, certain
- fault, approx. located
- fault, concealed
- thrust fault, certain
- thrust fault, approx. located
- thrust fault, approx. located, queried
- fault, certain, barball
- fault, concealed, barball
- fault, approx. located, barball

Quaternary Faults

- fault, certain
- fault, approx. located
- fault, approx. located, queried
- fault, inferred, queried
- fault, concealed
- fault, concealed, queried
- thrust fault, certain
- thrust fault, approx. located
- thrust fault, concealed
- dextral fault, certain
- dextral fault, approx. located
- dextral fault, concealed
- sinistral fault, certain
- sinistral fault, approx. located
- sinistral fault, concealed
- thrust fault, certain (2)
- thrust fault, approx. located (2)
- thrust fault, concealed (2)
- fault, solid, barball
- fault, dashed, barball
- fault, dotted, barball
- dextral fault, solid, barball
- fault, dotted, queried, ballbar
- fault, dotted, queried, ballbar (2)
- fault, solid, dip
- fault, dashed, dip
- fault, dotted, dip
- reverse fault, solid
- reverse fault, dashed
- reverse fault, dotted

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Figure Title
CGS FAULT ACTIVITY MAP OF CALIFORNIA LEGEND

Project No.	700060401
Date	APRIL 2019
Scale	NOT TO SCALE
Drawn By	BJS

Figure
2B

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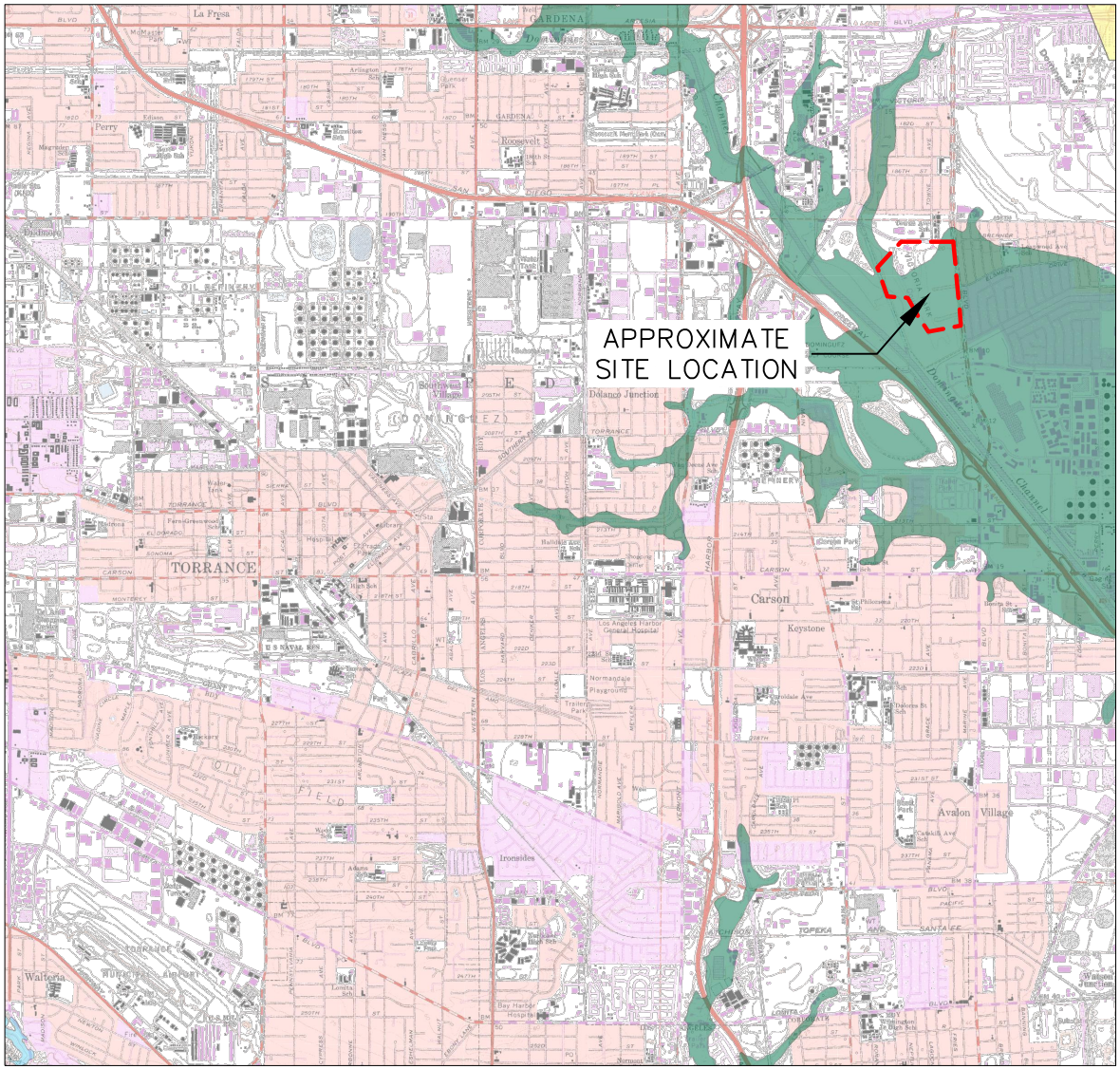

NOTES:

1. BACKGROUND REFERENCED FROM "CALIFORNIA GEOLOGICAL SURVEY, EARTHQUAKE ZONES OF REQUIRED INVESTIGATION, TORRANCE QUADRANGLE," PREPARED BY STATE OF CALIFORNIA, DEPARTMENT OF CONSERVATION, DATED 25 MARCH 1999.

LEGEND:

- APPROXIMATE SITE LIMITS
- AP ZONE BOUNDARY
- LIQUEFACTION INVESTIGATION ZONES
- EARTHQUAKE–INDUCED LANDSLIDE ZONES

PRIVILEGED AND CONFIDENTIAL - PREPARED AT REQUEST OF COUNSEL

5000 2500 0 5000

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Figure Title

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES AND SEISMIC HAZARD ZONES MAP

Project No.	700060401
Date	APRIL 2019
Scale	1" = 5000'
Drawn By	AJT

Figure No. **3**

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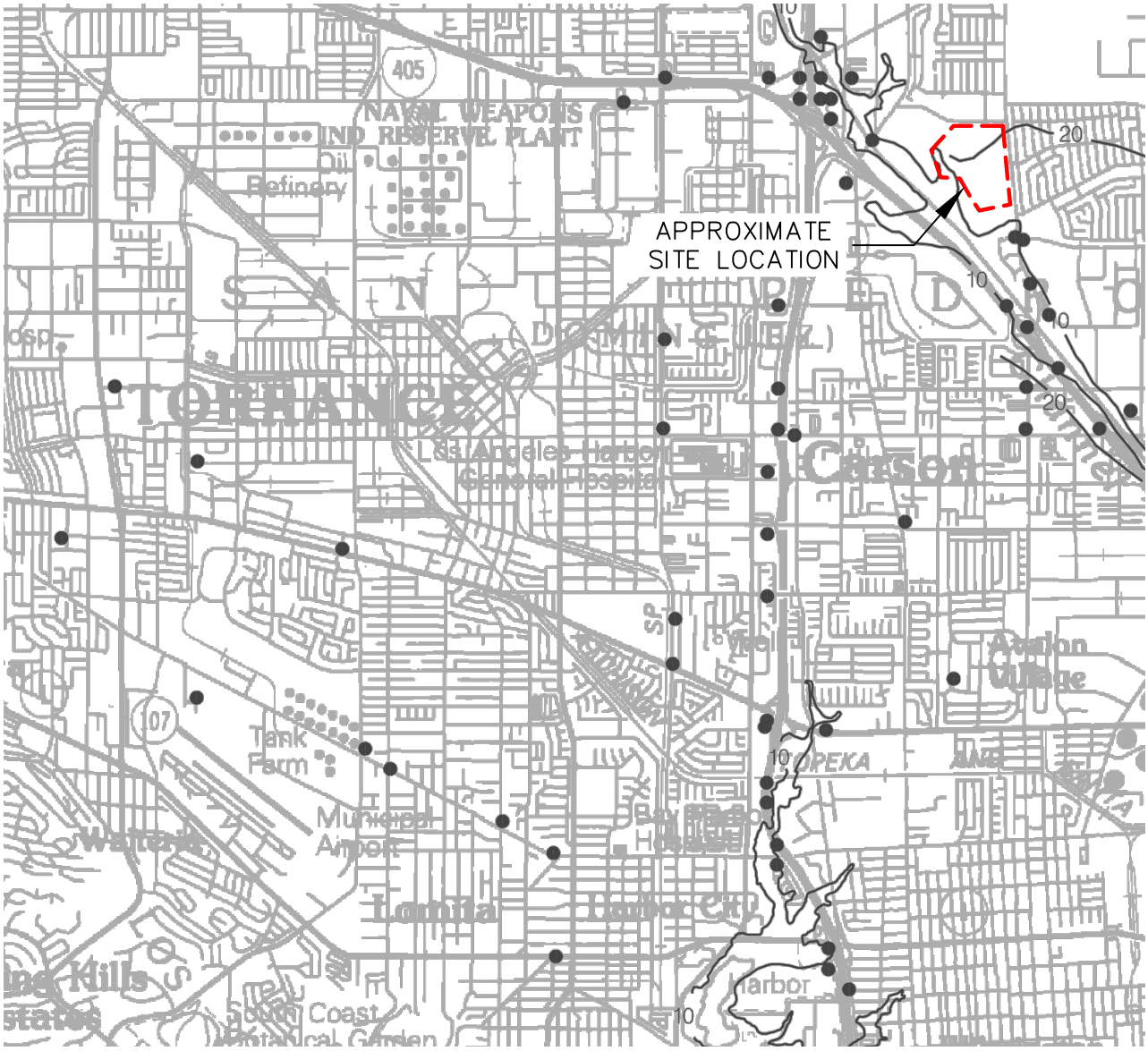

NOTES:

1. BACKGROUND REFERENCED FROM "SEISMIC HAZARD ZONE REPORT FOR THE TORRANCE 7.5-MINUTE QUADRANGLE, LOS ANGELES COUNTY, CALIFORNIA – PLATE 1.2," PREPARED BY STATE OF CALIFORNIA, DEPARTMENT OF CONSERVATION, DATED 1998.

LEGEND:

APPROXIMATE SITE LIMITS

30 DEPTH TO GROUNDWATER (IN FEET)

5000 2500 0 5000

SCALE IN FEET

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Figure Title

HISTORICALLY HIGHEST GROUNDWATER CONTOURS

Project No.	700060401
Date	APRIL 2019
Scale	1" = 5000'
Drawn By	AJT

Figure No. **4**

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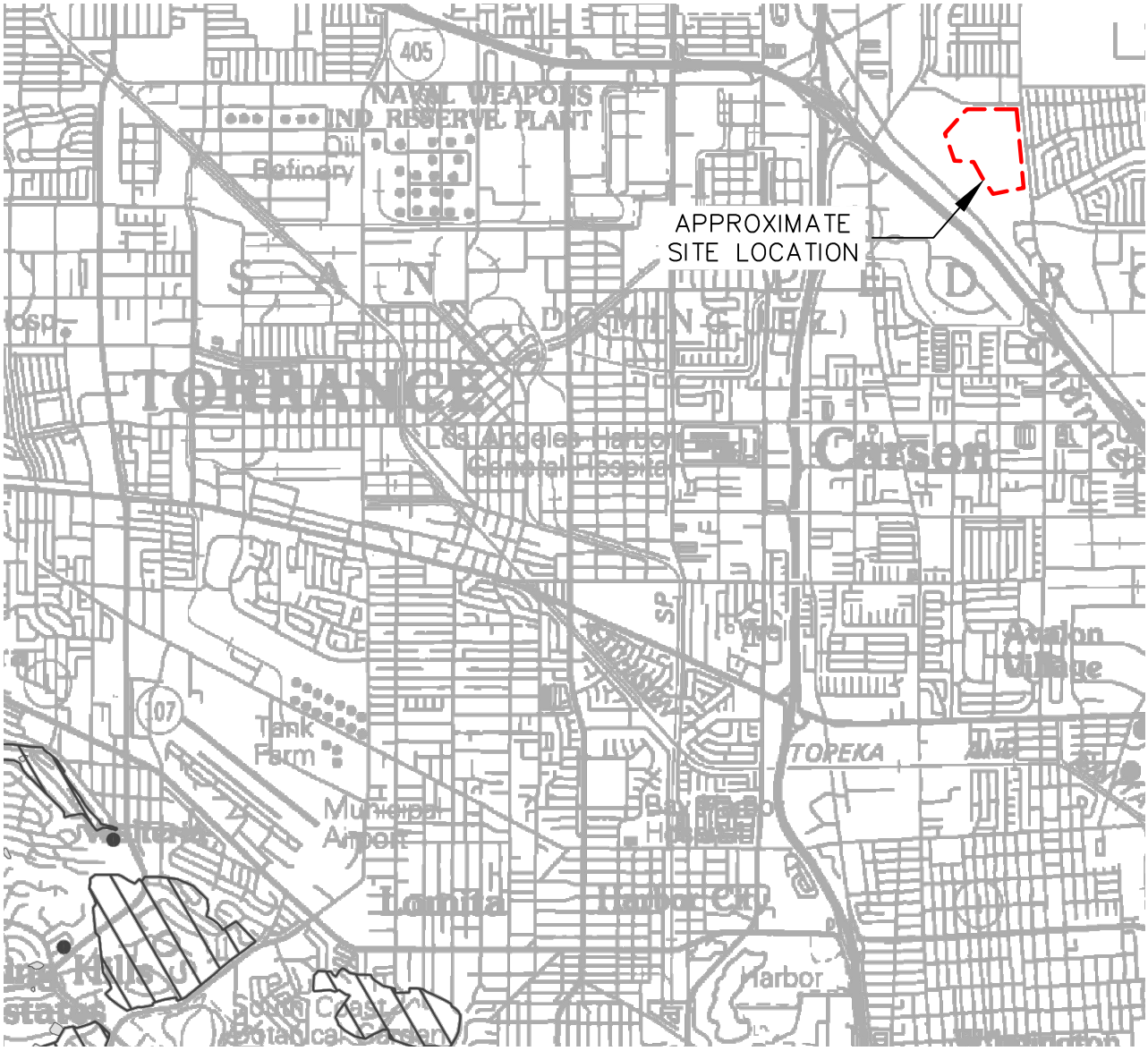

NOTES:

1. BACKGROUND REFERENCED FROM "SEISMIC HAZARD ZONE REPORT FOR THE TORRANCE 7.5-MINUTE QUADRANGLE, LOS ANGELES COUNTY, CALIFORNIA – PLATE 2.1," PREPARED BY STATE OF CALIFORNIA, DEPARTMENT OF CONSERVATION, DATED 1998.

LEGEND:

- APPROXIMATE SITE LIMITS
- LANDSLIDE
- AREAS OF SIGNIFICATION GRADING

5000 2500 0 5000

SCALE IN FEET

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Figure Title: LANDSLIDE INVENTORY

Project No. 700060401
Date APRIL 2019
Scale 1" = 5000'
Drawn By AJT

Figure No. 5

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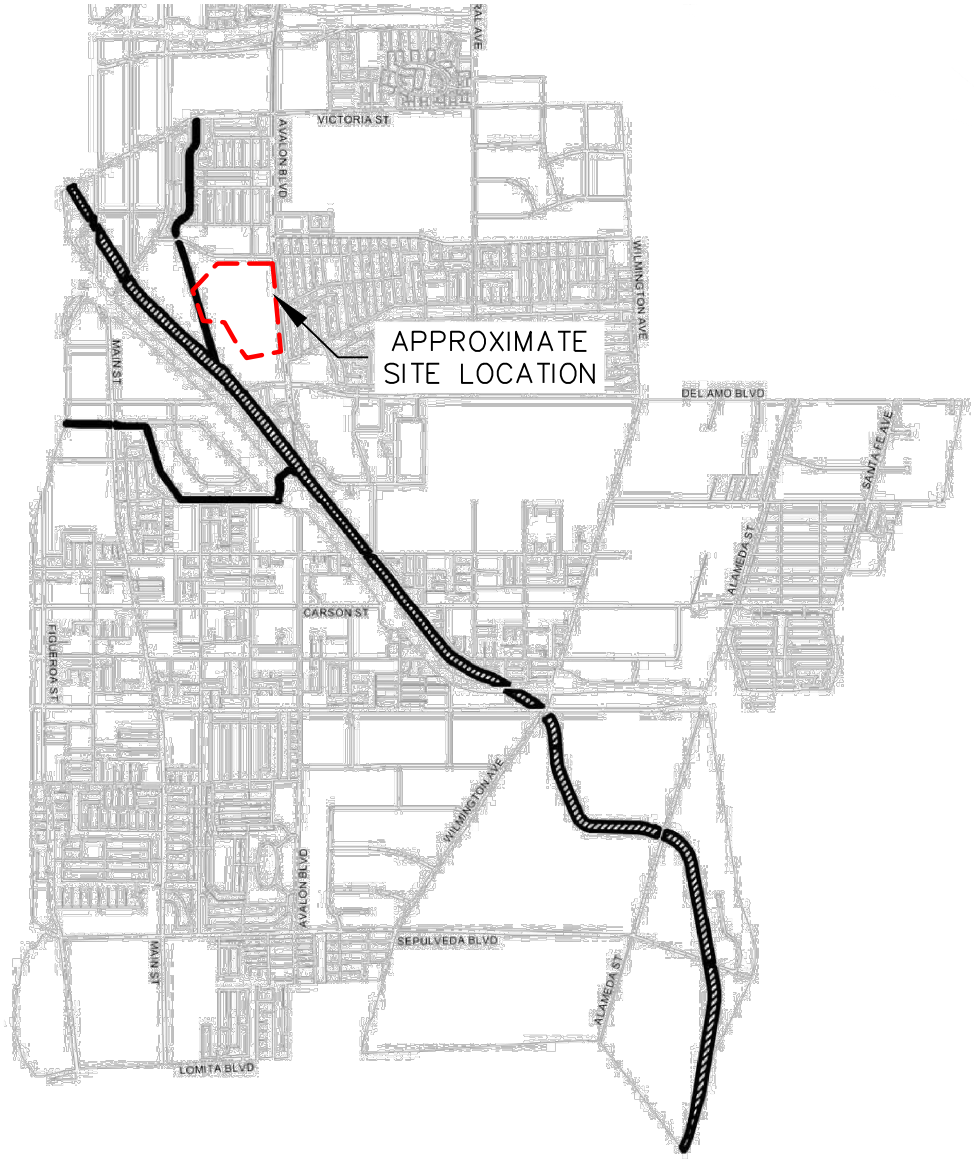
Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\2D-DesignFiles\Geotechnical\700060401 EIR Desk Study.dwg Date: 10/18/2018 Time: 10:26 User: lvazquez Style Table: Langan.stb Layout: 5



NOTES:

1. BACKGROUND REFERENCED FROM "CITY OF CARSON GENERAL PLAN, SAFETY ELEMENT, EXHIBIT SAF-1, FLOOD ZONE MAP," PREPARED BY GIS DATA, CITY OF CARSON, DATED 22 OCTOBER 2002.

LEGEND:

APPROXIMATE SITE LIMITS

100-YEAR FLOOD ZONE

5000 2500 0 5000

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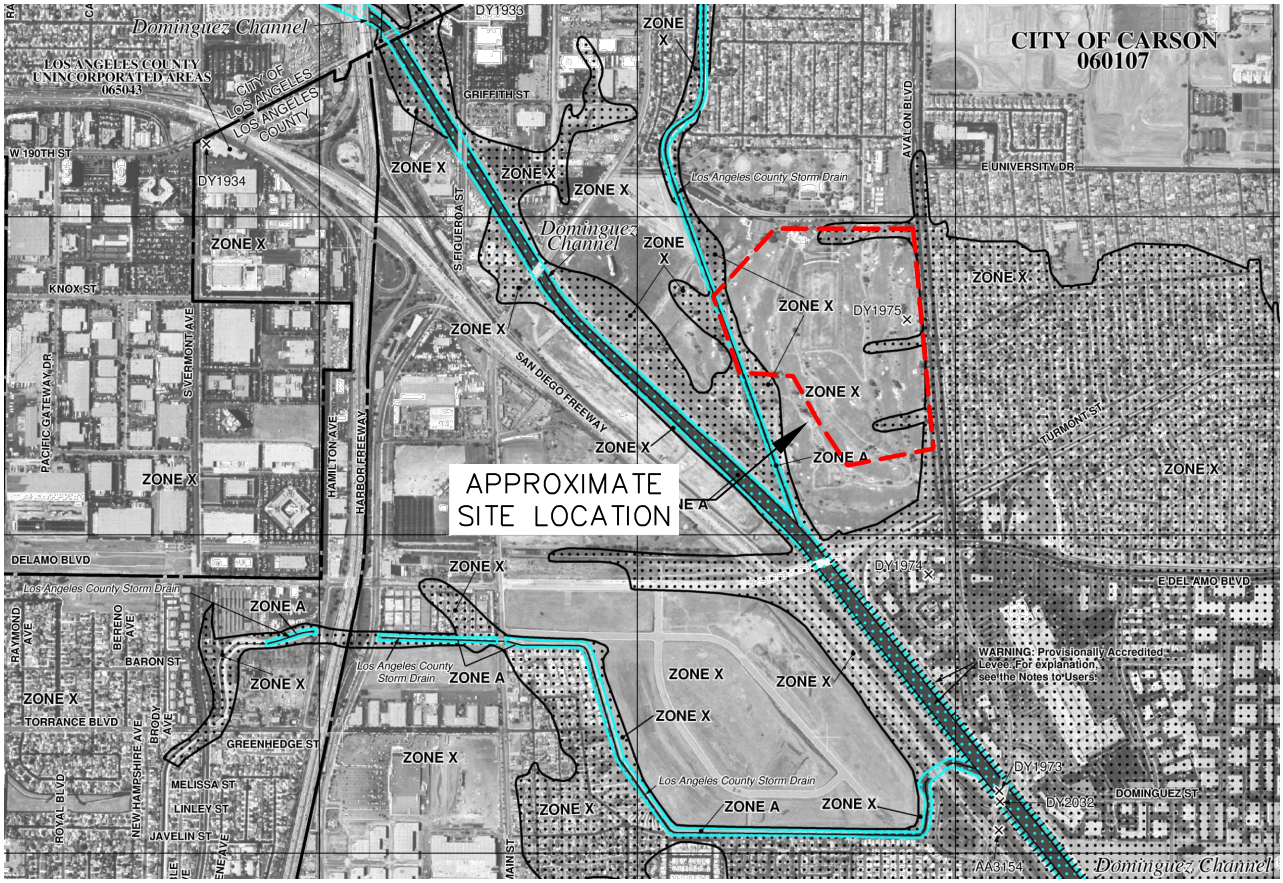
Figure Title
FLOOD ZONE MAP

Project No. 700060401
Date APRIL 2019
Scale 1" = 5000'
Drawn By AJT

Figure No. 6

© 2019 Langan

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\2D-DesignFiles\Geotechnical\700060401 EIR Desk Study.dwg Date: 10/18/2018 Time: 10:27 User: lvazquez Style Table: Langan.stb Layout: 6



NOTES:

1. BACKGROUND REFERENCED FROM "FLOOD INSURANCE RATE MAP, LOS ANGELES COUNTY, CALIFORNIA, AND INCORPORATED AREAS – PANEL 1935 OF 2350, MAP NUMBER 06037C1935F," PREPARED BY FEDERAL EMERGENCY MANAGEMENT AGENCY, DATED 26 SEPTEMBER 2008.

LEGEND:

- APPROXIMATE SITE LIMITS
- ZONE X — AREAS OF 0.2 PERCENT ANNUAL CHANCE FLOOD; AREAS OF 1 PERCENT ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1 PERCENT ANNUAL CHANCE FLOOD
- ZONE X — AREAS DETERMINED TO BE OUTSIDE THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN
- SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1 PERCENT ANNUAL CHANCE FLOOD

2000 1000 0 2000

SCALE IN FEET

PRIVILEGED AND CONFIDENTIAL - PREPARED AT REQUEST OF COUNSEL

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Project	Figure Title	Project No.	Figure No.
CAROL KIMMELMAN ATHLETIC AND ACADEMIC CAMPUS CARSON LOS ANGELES COUNTY CALIFORNIA	FLOOD INSURANCE RATE MAP	700060401 Date: APRIL 2019 Scale: 1" = 2000' Drawn By: AJT	7

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NOTES:

1. BACKGROUND REFERENCED FROM "LOS ANGELES COUNTY TSUNAMI INUNDATION WITH USGS 24K QUADS," PREPARED BY STATE OF CALIFORNIA, DEPARTMENT OF CONSERVATION, DATED 1 MARCH 2009.

LEGEND:

- APPROXIMATE SITE LIMITS
- MAPPED AREAS
- AFFECTED USGS QUADS
- INUNDATION LINE

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Langan Engineering & Environmental Services, Inc.

Project	CAROL KIMMELMAN ATHLETIC AND ACADEMIC CAMPUS CARSON LOS ANGELES COUNTY CALIFORNIA
Figure Title	TSUNAMI INUNDATION MAP
Project No.	700060401
Date	APRIL 2019
Scale	NOT TO SCALE
Drawn By	AJT
Figure No.	8

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Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\2D-DesignFiles\Geotechnical\700060401 EIR Desk Study.dwg Date: 10/18/2018 Time: 10:29 User: lvazquez Style Table: Langan.stb Layout: 8

APPENDIX A
Seismic Hazard Evaluation Results

TABLE A.1 - USGS 2008 CALIFORNIA SEISMIC SOURCE MODEL PARAMETERS

Fault Name	Distance from Site (km)	Direction from Site	Mean Characteristic Moment Magnitude	Mean Slip Rate (mm/yr)	Fault Length (km)
Newport-Inglewood, alt 1	2.5	East	7.20	1.0	65
Newport Inglewood Connected alt 1	2.5	East	7.20	1.3	208
Newport Inglewood Connected alt 2	3.0	Northeast	7.50	1.3	208
Palos Verdes Connected	9.1	Southwest	7.70	3.0	285
Palos Verdes	9.1	Southwest	7.30	3.0	99
Puente Hills (LA)	13.3	Northeast	7.00	0.7	22
Puente Hills (Santa Fe Springs)	13.7	East	6.90	0.7	11
Puente Hills (Coyote Hills)	21.6	East	6.90	0.7	17
Elysian Park (Upper)	23.9	North	6.70	1.3	20
Elsinore;W+GI+T+J+CM	26.0	Northeast	7.85	n/a	241
Elsinore;W	26.0	Northeast	7.03	2.5	46
Elsinore;W+GI	26.0	Northeast	7.27	n/a	83
Elsinore;W+GI+T	26.0	Northeast	7.48	n/a	124
Elsinore;W+GI+T+J	26.0	Northeast	7.77	n/a	199
Santa Monica Connected alt 2	26.3	Northwest	7.40	2.4	93
Santa Monica, alt 1	26.9	Northwest	6.40	1.0	14
Santa Monica Connected alt 1	26.9	Northwest	7.30	2.6	79
Hollywood	28.4	Northwest	6.70	1.0	17
Raymond	30.1	North	6.80	1.5	22
Malibu Coast, alt 2	30.4	Northwest	7.00	0.3	38
Malibu Coast, alt 1	30.4	Northwest	6.70	0.3	38
Anacapa-Dume, alt 2	31.8	West	7.20	3.0	65

Notes:

1. Seismic source model parameters obtained from USGS 2008 National Seismic Hazard Maps - Source Parameters on 18 July 2018.
2. Search results include sources within 20 mi (32 km) of the Site.

TABLE A.2 - USGS ANSS COMPREHENSIVE CATALOG SEARCH RESULTS

Date [1,3]	Latitude [1,3]	Longitude [1,3]	Approximate Magnitude [1,3]	Magnitude Type [2]	Approximate Distance from Site (km) [1,3]
3/29/2014	33.9325	-117.9158	5.10	mw	34
7/29/2008	33.9485	-117.7663	5.44	mw	48
4/26/1997	34.3690	-118.6700	5.07	ml	68
6/26/1995	34.3940	-118.6690	5.02	ml	70
3/20/1994	34.2310	-118.4750	5.24	ml	46
1/29/1994	34.3060	-118.5790	5.06	ml	58
1/19/1994	34.3780	-118.6190	5.07	ml	66
1/19/1994	34.3790	-118.7120	5.06	ml	71
1/18/1994	34.3770	-118.6980	5.24	ml	70
1/17/1994	34.3260	-118.6980	5.58	ml	65
1/17/1994	34.3400	-118.6140	5.20	ml	62
1/17/1994	34.2750	-118.4930	5.89	ml	51
1/17/1994	34.2130	-118.5370	6.70	mw	47
6/28/1991	34.2700	-117.9930	5.80	mw	53
2/28/1990	34.1440	-117.6970	5.51	ml	62
12/3/1988	34.1510	-118.1300	5.02	ml	36
10/4/1987	34.0740	-118.0980	5.25	ml	29
10/1/1987	34.0610	-118.0790	5.90	mw	29
9/4/1981	33.5575	-119.1195	5.45	ml	85
1/1/1979	33.9165	-118.6872	5.21	ml	39
2/21/1973	33.9790	-119.0502	5.30	mw	73
2/9/1971	34.4160	-118.3700	5.30	mh	63
2/9/1971	34.4160	-118.3700	5.80	mh	63
2/9/1971	34.4160	-118.3700	5.80	mh	63
2/9/1971	34.4160	-118.3700	6.60	mw	63
9/12/1970	34.2548	-117.5343	5.22	ml	81
11/14/1941	33.7907	-118.2637	5.12	ml	7
5/31/1938	33.6993	-117.5112	5.23	ml	72
3/11/1933	33.6238	-118.0012	5.29	mh	36
3/11/1933	33.7667	-117.9850	5.02	mh	28
3/11/1933	33.6308	-117.9995	6.40	mw	35
3/10/1922	34.2430	-119.0970	6.50	mw	87
4/21/1918	33.6470	-117.4330	6.70	mw	81

Notes:

1. Earthquake Catalog Search results obtained from USGS ANSS Comprehensive Catalog on 18 July 2018.
2. Refer to USGS ANSS Comprehensive Catalog and USGS Earthquake Hazards Program for additional information on magnitude types.
3. Earthquake Catalog search results include earthquake events within 100 km of the Site with magnitudes of 5.0 or greater since 1900.

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*                       *
*    E Q S E A R C H    *
*                       *
*     Version 3.00      *
*                       *
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ESTIMATION OF
PEAK ACCELERATION FROM
CALIFORNIA EARTHQUAKE CATALOGS

JOB NUMBER: 700060401

DATE: 07-23-2018

JOB NAME: CAROL KIMMMELMAN ATHLETIC AND ACADEMIC CENTER

EARTHQUAKE-CATALOG-FILE NAME: ALLQUAKE.DAT

MAGNITUDE RANGE:
   MINIMUM MAGNITUDE: 5.00
   MAXIMUM MAGNITUDE: 9.00

SITE COORDINATES:
   SITE LATITUDE: 33.8539
   SITE LONGITUDE: 118.2726

SEARCH DATES:
           START DATE: 1800
           END DATE: 2018

SEARCH RADIUS:
           62.2 mi
           100.1 km

ATTENUATION RELATION: 14) Campbell & Bozorgnia (1997 Rev.) - Alluvium
   UNCERTAINTY (M=Median, S=Sigma): M   Number of Sigmas: 0.0
   ASSUMED SOURCE TYPE: SS [SS=Strike-slip, DS=Reverse-slip, BT=Blind-thrust]
   SCOND: 0 Depth Source: A
   Basement Depth: 5.00 km   Campbell SSR: 0   Campbell SHR: 0
   COMPUTE PEAK HORIZONTAL ACCELERATION

MINIMUM DEPTH VALUE (km): 3.0

EQSEARCH Output.OUT

EARTHQUAKE SEARCH RESULTS

Page 1

FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC) H M Sec	DEPTH (km)	QUAKE MAG.	SITE ACC. g	SITE MM INT.	APPROX. DISTANCE mi [km]
DMG	33.8500	118.2670	03/11/1933	1425 0.0	0.0	5.00	0.166	VIII	0.4(0.7)
DMG	33.7830	118.2500	11/14/1941	84136.3	0.0	5.40	0.157	VIII	5.1(8.1)
DMG	33.7830	118.1330	10/02/1933	91017.6	0.0	5.40	0.091	VII	9.4(15.1)
T-A	34.0000	118.2500	01/10/1856	0 0 0.0	0.0	5.00	0.058	VI	10.2(16.4)
T-A	34.0000	118.2500	03/26/1860	0 0 0.0	0.0	5.00	0.058	VI	10.2(16.4)
T-A	34.0000	118.2500	09/23/1827	0 0 0.0	0.0	5.00	0.058	VI	10.2(16.4)
MGI	34.0000	118.3000	09/03/1905	540 0.0	0.0	5.30	0.076	VII	10.2(16.4)
DMG	33.7500	118.0830	03/11/1933	230 0.0	0.0	5.10	0.048	VI	13.0(21.0)
DMG	33.7500	118.0830	03/11/1933	910 0.0	0.0	5.10	0.048	VI	13.0(21.0)
DMG	33.7500	118.0830	03/11/1933	323 0.0	0.0	5.00	0.044	VI	13.0(21.0)
DMG	33.7500	118.0830	03/13/1933	131828.0	0.0	5.30	0.058	VI	13.0(21.0)
DMG	33.7500	118.0830	03/11/1933	2 9 0.0	0.0	5.00	0.044	VI	13.0(21.0)
MGI	34.0800	118.2600	07/16/1920	18 8 0.0	0.0	5.00	0.035	V	15.6(25.1)
DMG	33.7000	118.0670	03/11/1933	85457.0	0.0	5.10	0.038	V	15.9(25.5)
DMG	33.7000	118.0670	03/11/1933	51022.0	0.0	5.10	0.038	V	15.9(25.5)
MGI	34.0000	118.5000	11/19/1918	2018 0.0	0.0	5.00	0.033	V	16.5(26.5)
DMG	34.0000	118.5000	08/04/1927	1224 0.0	0.0	5.00	0.033	V	16.5(26.5)
DMG	33.6830	118.0500	03/11/1933	658 3.0	0.0	5.50	0.049	VI	17.4(28.0)
PAS	34.0610	118.0790	10/01/1987	144220.0	9.5	5.90	0.067	VI	18.1(29.1)
PAS	34.0730	118.0980	10/04/1987	105938.2	8.2	5.30	0.039	V	18.1(29.2)
MGI	34.0000	118.0000	12/25/1903	1745 0.0	0.0	5.00	0.029	V	18.6(29.9)
MGI	34.1000	118.1000	07/11/1855	415 0.0	0.0	6.30	0.086	VII	19.7(31.6)
PAS	33.9190	118.6270	01/19/1989	65328.8	11.9	5.00	0.025	V	20.8(33.5)
DMG	33.9500	118.6320	08/31/1930	04036.0	0.0	5.20	0.028	V	21.6(34.8)
DMG	33.6170	118.0170	03/14/1933	19 150.0	0.0	5.10	0.025	V	22.0(35.4)
DMG	33.6170	117.9670	03/11/1933	154 7.8	0.0	6.30	0.067	VI	24.0(38.6)
PAS	33.9440	118.6810	01/01/1979	231438.9	11.3	5.00	0.021	IV	24.2(39.0)
DMG	33.5750	117.9830	03/11/1933	518 4.0	0.0	5.20	0.023	IV	25.4(40.9)
GSP	34.2310	118.4750	03/20/1994	212012.3	13.0	5.30	0.022	IV	28.5(45.8)
GSP	34.2130	118.5370	01/17/1994	123055.4	18.0	6.70	0.074	VII	29.0(46.7)
DMG	34.2000	117.9000	08/28/1889	215 0.0	0.0	5.50	0.023	IV	32.0(51.5)
GSP	34.2620	118.0020	06/28/1991	144354.5	11.0	5.40	0.021	IV	32.1(51.7)
DMG	34.3080	118.4540	02/09/1971	144346.7	6.2	5.20	0.017	IV	33.0(53.1)
GSB	34.3010	118.5650	01/17/1994	204602.4	9.0	5.20	0.015	IV	35.1(56.5)
GSP	34.3050	118.5790	01/29/1994	112036.0	1.0	5.10	0.014	III	35.7(57.5)
DMG	34.3000	118.6000	04/04/1893	1940 0.0	0.0	6.00	0.030	V	36.0(58.0)
GSP	34.1400	117.7000	02/28/1990	234336.6	5.0	5.20	0.014	III	38.3(61.6)
MGI	33.8000	117.6000	04/22/1918	2115 0.0	0.0	5.00	0.011	III	38.8(62.4)
DMG	34.4110	118.4010	02/09/1971	14 244.0	8.0	5.80	0.023	IV	39.2(63.0)
DMG	34.4110	118.4010	02/09/1971	14 1 8.0	8.0	5.80	0.023	IV	39.2(63.0)
DMG	34.4110	118.4010	02/09/1971	14 041.8	8.4	6.40	0.039	V	39.2(63.0)
DMG	34.4110	118.4010	02/09/1971	141028.0	8.0	5.30	0.015	IV	39.2(63.0)
GSP	34.3260	118.6980	01/17/1994	233330.7	9.0	5.60	0.018	IV	40.7(65.4)
GSP	34.3780	118.6180	01/19/1994	211144.9	11.0	5.10	0.011	III	41.2(66.3)
GSP	34.3690	118.6720	04/26/1997	103730.7	16.0	5.10	0.011	III	42.3(68.0)
DMG	34.0000	119.0000	09/24/1827	4 0 0.0	0.0	7.00	0.059	VI	42.9(69.0)
MGI	34.0000	119.0000	12/14/1912	0 0 0.0	0.0	5.70	0.018	IV	42.9(69.0)
GSP	34.3770	118.6980	01/18/1994	004308.9	11.0	5.20	0.012	III	43.5(70.1)
GSP	34.3940	118.6690	06/26/1995	084028.9	13.0	5.00	0.010	III	43.6(70.2)
GSB	34.3790	118.7110	01/19/1994	210928.6	14.0	5.50	0.015	IV	44.1(70.9)
DMG	33.6990	117.5110	05/31/1938	83455.4	10.0	5.50	0.014	IV	45.0(72.4)
MGI	34.0000	117.5000	12/16/1858	10 0 0.0	0.0	7.00	0.055	VI	45.4(73.0)
DMG	34.0650	119.0350	02/21/1973	144557.3	8.0	5.90	0.020	IV	46.0(74.1)

EARTHQUAKE SEARCH RESULTS

FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC) H M Sec	DEPTH (km)	QUAKE MAG.	SITE ACC. g	SITE MM INT.	APPROX. DISTANCE mi [km]
DMG	34.5190	118.1980	08/23/1952	10 9 7.1	13.1	5.00	0.009	III	46.1(74.2)
DMG	34.3000	117.6000	07/30/1894	512 0.0	0.0	6.00	0.020	IV	49.3(79.3)
PAS	33.6710	119.1110	09/04/1981	155050.3	5.0	5.30	0.011	III	49.7(80.1)
DMG	34.3700	117.6500	12/08/1812	15 0 0.0	0.0	7.00	0.048	VI	50.4(81.0)
DMG	34.2700	117.5400	09/12/1970	143053.0	8.0	5.40	0.011	III	50.8(81.8)
DMG	33.7000	117.4000	05/13/1910	620 0.0	0.0	5.00	0.008	II	51.2(82.4)
DMG	33.7000	117.4000	05/15/1910	1547 0.0	0.0	6.00	0.019	IV	51.2(82.4)
DMG	33.7000	117.4000	04/11/1910	757 0.0	0.0	5.00	0.008	II	51.2(82.4)
DMG	34.3000	117.5000	07/22/1899	2032 0.0	0.0	6.50	0.028	V	53.9(86.7)
DMG	34.2000	117.4000	07/22/1899	046 0.0	0.0	5.50	0.011	III	55.4(89.1)
MGI	34.1000	117.3000	07/15/1905	2041 0.0	0.0	5.30	0.009	III	58.2(93.7)
DMG	34.0000	117.2500	07/23/1923	73026.0	0.0	6.25	0.020	IV	59.4(95.7)
DMG	33.9000	117.2000	12/19/1880	0 0 0.0	0.0	6.00	0.015	IV	61.6(99.1)

****

-END OF SEARCH- 66 EARTHQUAKES FOUND WITHIN THE SPECIFIED SEARCH AREA.

TIME PERIOD OF SEARCH: 1800 TO 2018

LENGTH OF SEARCH TIME: 219 years

THE EARTHQUAKE CLOSEST TO THE SITE IS ABOUT 0.4 MILES (0.7 km) AWAY.

LARGEST EARTHQUAKE MAGNITUDE FOUND IN THE SEARCH RADIUS: 7.0

LARGEST EARTHQUAKE SITE ACCELERATION FROM THIS SEARCH: 0.166 g

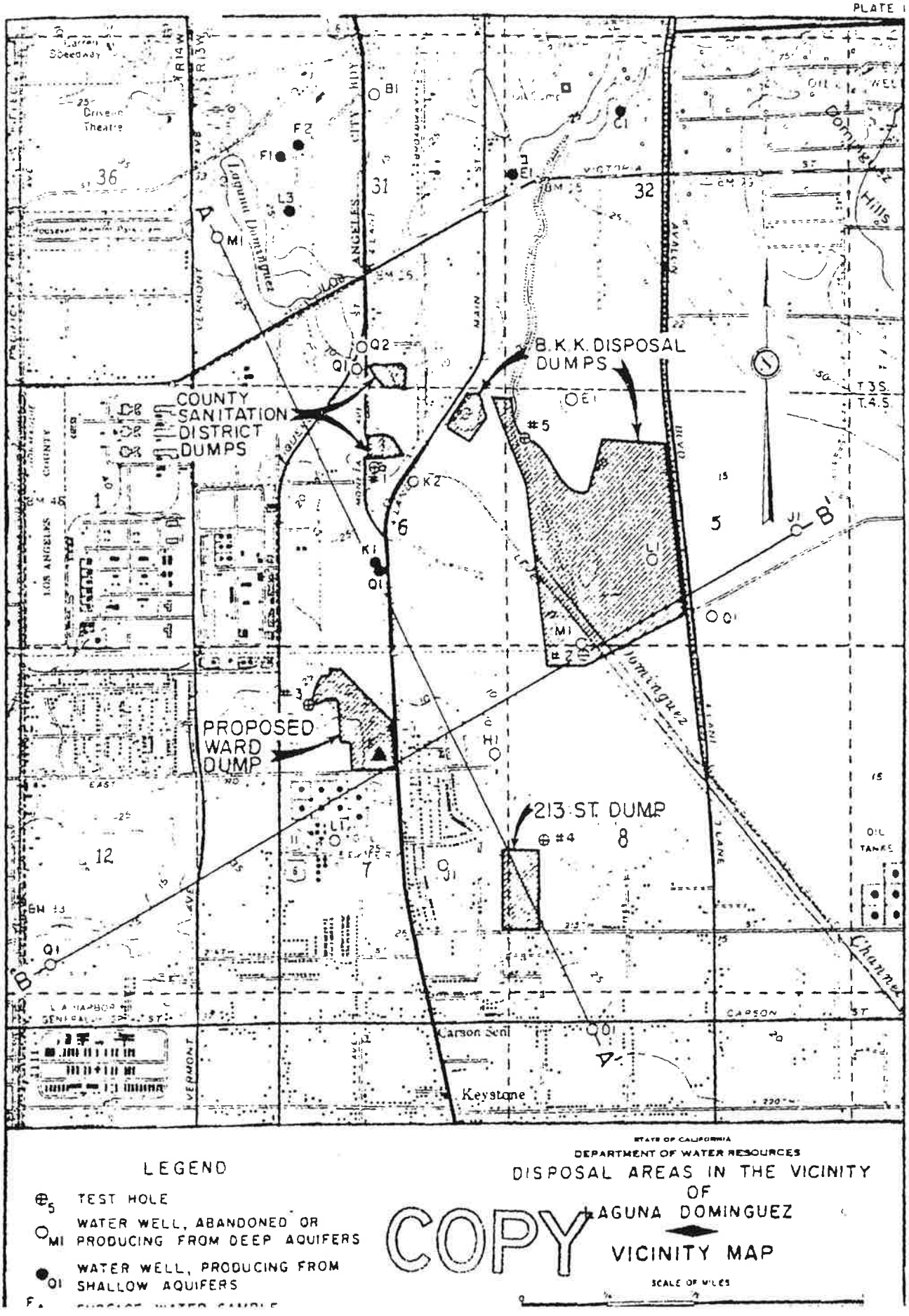
COEFFICIENTS FOR GUTENBERG & RICHTER RECURRENCE RELATION:
- a-value= 1.101
- b-value= 0.370
- beta-value= 0.852

TABLE OF MAGNITUDES AND EXCEEDANCES:

Earthquake Magnitude	Number of Times Exceeded	Cumulative No. / Year
4.0	66	0.30137
4.5	66	0.30137
5.0	66	0.30137
5.5	24	0.10959
6.0	13	0.05936
6.5	5	0.02283
7.0	3	0.01370

APPENDIX B
Limit of Waste Figures

PLATE 1



LEGEND

- ⊕5 TEST HOLE
- ○MI WATER WELL, ABANDONED OR PRODUCING FROM DEEP AQUIFERS
- ●O1 WATER WELL, PRODUCING FROM SHALLOW AQUIFERS
- F4 SURFACE WATER SAMPLE

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

DISPOSAL AREAS IN THE VICINITY OF LAGUNA DOMINGUEZ

VICINITY MAP

SCALE OF MILES

COPY

COPY

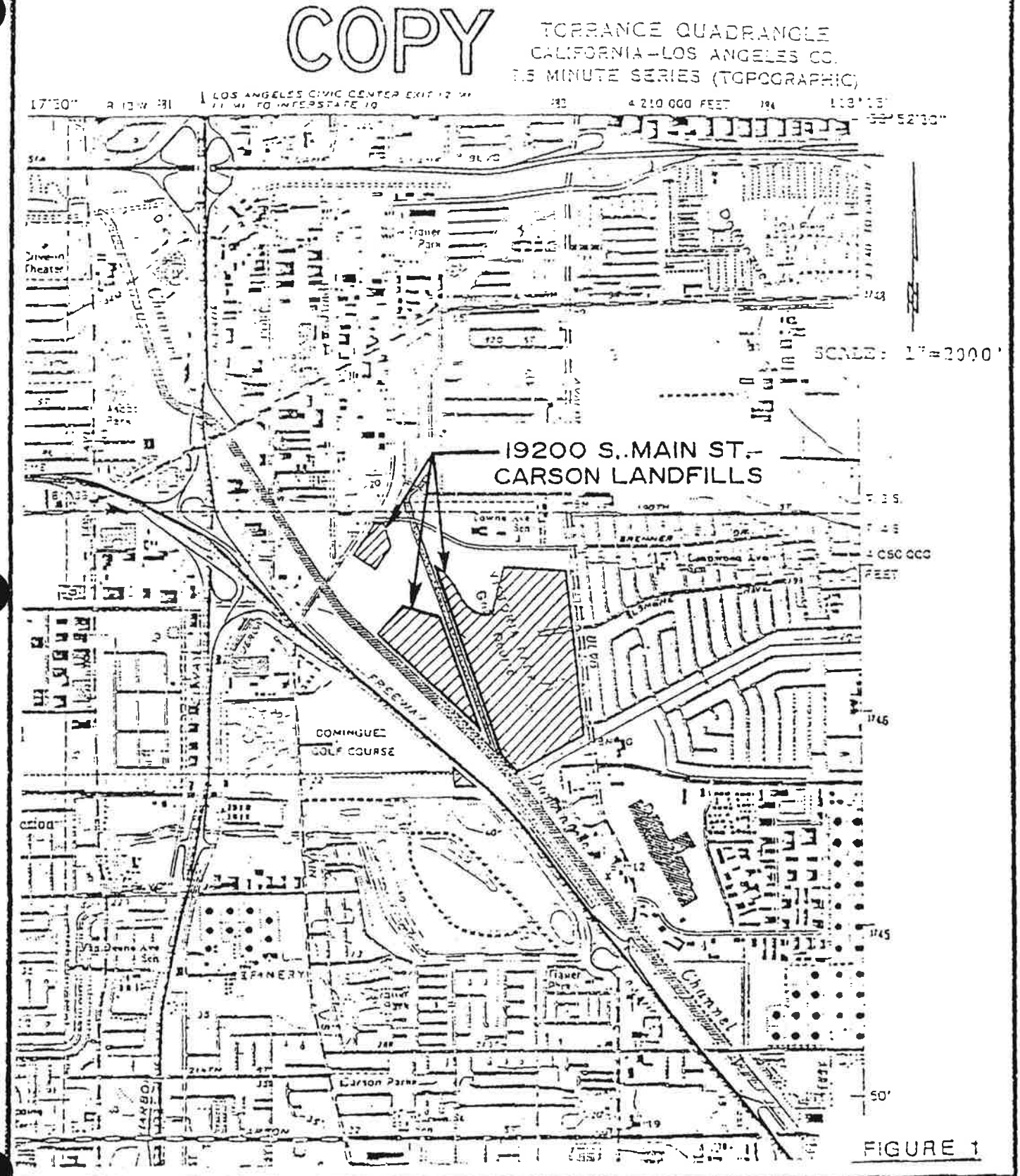


FIGURE 1

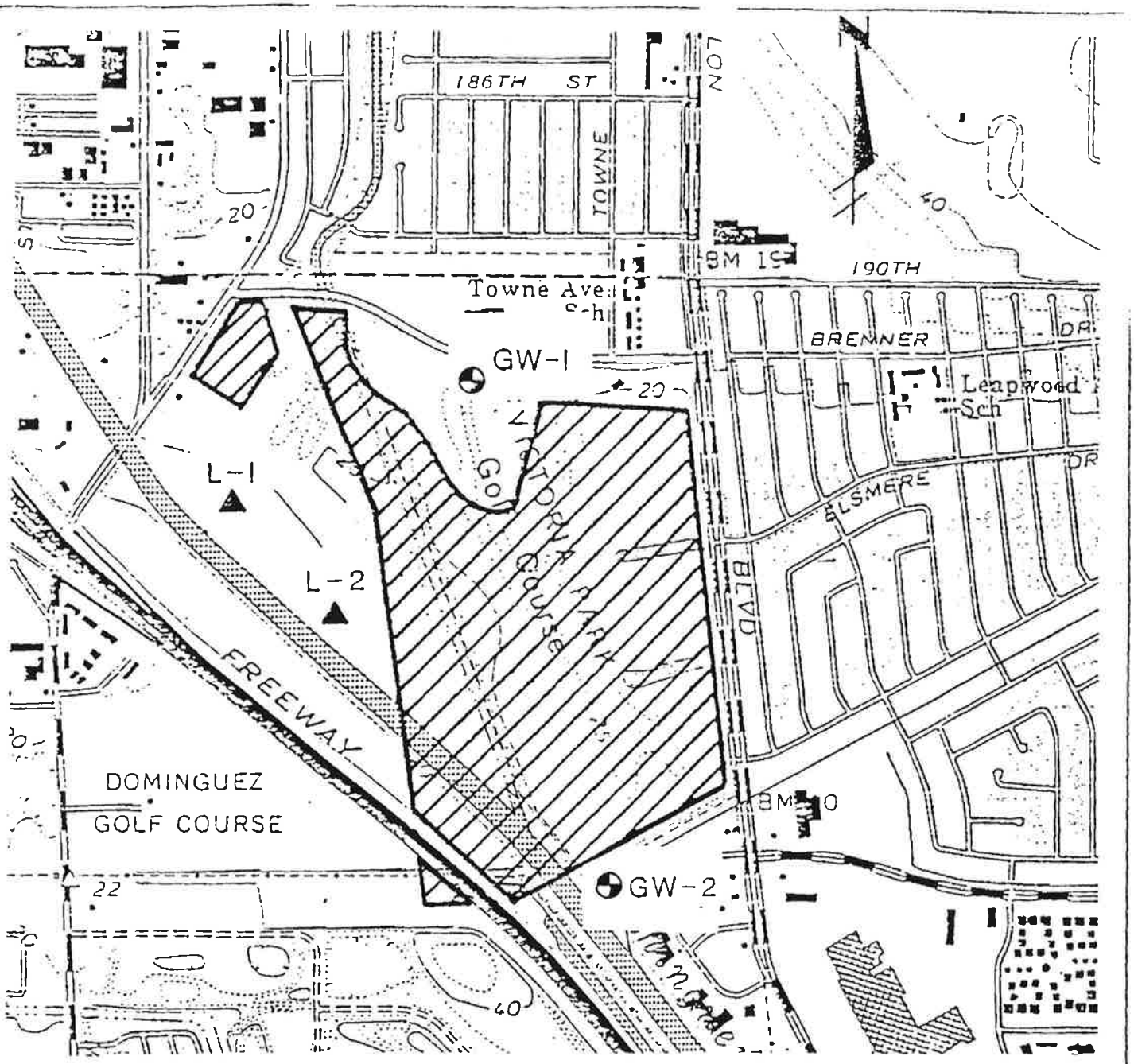
BAS

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS

(714) 394-5009

SITE LOCATION MAP
19200 S. MAIN ST.
CARSON, CA

JOB NO.	8814
DATE	6/88
DRAWN BY:	DS
CHECKED BY:	



COPY

LEGEND

▲ L- LYSIMETER

◓ GW- GROUND WATER MONITORING WELL

NOTE:

LIMITS OF REFUSE IS BASED ON 1956 D.W.R. INVESTIGATION NO.57-4-7

FIGURE 2

BAS

[714] 594-5008

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS

1199 FAIRWAY DR • P.O. BOX 7085 • INDUSTRY CA 91744

PROPOSED MONITORING LOCATIONS SWAT INVESTIGATION

JB NO.	
DATE	6/88
DRAWN BY:	RS
CHECKED BY:	

REMEDIAL INVESTIGATION - FIGURE 3.1-1

R.I. Sample and Well Locations

Leighton

FORMER BKK LANDFILL, OU-2, CARSON, CALIFORNIA

Geol: MKM/REW | Date: 05/11 | GIS: KVM

Map Saved as V:\Drafting\600872\104\GIS\June 2011\311_SamplesWells_Topo.mxd on 5/26/2011 10:50:18 AM
Author: kmanchikanti

LEGEND

Groundwater

- RI - 2 Well Cluster: UB and MB
- RI - 4 Well Cluster: UB, MB, L-MB, GA, and Stratigraphic Corehole
- RI - Hydropunch
- *Weston 2001 Monitor Well*

Soil Gas

- Building Perimeter Probe
- Landifll Perimeter Well

Multiple Media Samples

- RI – Grid and Off-Grid Boring
- RI – Supplemental Soil Cover Grid Boring
- RI - Surface Water and Soil Run-off

Former BKK Landfill

- Operable Unit-1
- Operable Unit-2
- Current Waste Limit, OU-2
- Goodyear Airship Operations Center
- See Plate II for Sample and Well Location Details

N

0 250 500 1,000 Feet

1 " = 500 '

Investigation Area Topography from Aerial Topographic Survery Dulin & Boynton, 2007

APPENDIX G

CalEEMod Data Sheets

Kimmelman Project - Existing Victoria Links Golf Course

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Golf Course	87.00	Acre	87.00	3,789,720.00	0
Health Club	17.70	1000sqft	0.00	17,700.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2000
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year - 2000.

Land Use - Lot Acreage accounted for in the Golf Course land use.

Construction Phase - No construction. Estimating existing operational emissions only.

Off-road Equipment - No Construction.

Trips and VMT - No construction.

Grading - No Construction.

Vehicle Trips - Trip Generation rates are based on daily trips for the existing golf course from the project's traffic study.

Energy Use - CalEEMod Defaults

Water And Wastewater - Existing water use data provided by the projet applicant.

Off-road Equipment - No Construction use

Off-road Equipment - No Construction use

Off-road Equipment - No Construction activity

Off-road Equipment - No construction activity

Off-road Equipment - No construction activity

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	1,550.00	0.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	155.00	0.00
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	60.00	0.00
tblConstructionPhase	PhaseEndDate	3/26/2027	10/23/2026
tblConstructionPhase	PhaseEndDate	5/22/2026	6/12/2020
tblConstructionPhase	PhaseEndDate	8/16/2019	3/31/2019
tblConstructionPhase	PhaseEndDate	6/12/2020	11/8/2019
tblConstructionPhase	PhaseEndDate	10/23/2026	5/22/2026
tblConstructionPhase	PhaseEndDate	11/8/2019	8/16/2019
tblLandUse	LotAcreage	0.41	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	VendorTripNumber	624.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,599.00	0.00
tblTripsAndVMT	WorkerTripNumber	320.00	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	SU_TR	5.88	5.82
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	WD_TR	5.04	3.74
tblVehicleTrips	WD_TR	32.93	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1204	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.6000e-003	2.6000e-003	2.0000e-005	0.0000	3.0400e-003

Energy	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	79.6957	79.6957	2.9100e-003	8.5000e-004	80.0213
Mobile	0.8556	2.3027	10.8356	0.0139	0.3491	0.0560	0.4050	0.0936	0.0531	0.1467	0.0000	474.5181	474.5181	0.0802	0.0000	476.5224
Waste						0.0000	0.0000		0.0000	0.0000	36.9038	0.0000	36.9038	2.1810	0.0000	91.4275
Water						0.0000	0.0000		0.0000	0.0000	0.3321	373.5547	373.8868	0.0495	4.0000e-003	376.3160
Total	**0.9777**	**2.3184**	**10.8512**	**0.0139**	**0.3491**	**0.0572**	**0.4062**	**0.0936**	**0.0543**	**0.1479**	**37.2359**	**927.7711**	**965.0070**	**2.3136**	**4.8500e-003**	**1,024.2902**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1204	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.6000e-003	2.6000e-003	2.0000e-005	0.0000	3.0400e-003
Energy	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	79.6957	79.6957	2.9100e-003	8.5000e-004	80.0213
Mobile	0.8556	2.3027	10.8356	0.0139	0.3491	0.0560	0.4050	0.0936	0.0531	0.1467	0.0000	474.5181	474.5181	0.0802	0.0000	476.5224
Waste						0.0000	0.0000		0.0000	0.0000	36.9038	0.0000	36.9038	2.1810	0.0000	91.4275
Water						0.0000	0.0000		0.0000	0.0000	0.3321	373.5547	373.8868	0.0495	4.0000e-003	376.3160
Total	**0.9777**	**2.3184**	**10.8512**	**0.0139**	**0.3491**	**0.0572**	**0.4062**	**0.0936**	**0.0543**	**0.1479**	**37.2359**	**927.7711**	**965.0070**	**2.3136**	**4.8500e-003**	**1,024.2902**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	3/31/2019	5	0	
2	Site Preparation	Site Preparation	8/17/2019	8/16/2019	5	0	
3	Grading	Grading	11/9/2019	11/8/2019	5	0	
4	Building Construction	Building Construction	6/13/2020	6/12/2020	5	0	
5	Paving	Paving	5/23/2026	5/22/2026	5	0	
6	Architectural Coating	Architectural Coating	10/24/2026	10/23/2026	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 26,550; Non-Residential Outdoor: 8,850; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45

Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Grading		0			

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8556	2.3027	10.8356	0.0139	0.3491	0.0560	0.4050	0.0936	0.0531	0.1467	0.0000	474.5181	474.5181	0.0802	0.0000	476.5224

Unmitigated	0.8556	2.3027	10.8356	0.0139	0.3491	0.0560	0.4050	0.0936	0.0531	0.1467	0.0000	474.5181	474.5181	0.0802	0.0000	476.5224

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	325.38	506.34	506.34	918,390	918,390
Health Club	0.00	0.00	0.00		
Total	325.38	506.34	506.34	918,390	918,390

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Golf Course	0.563301	0.087805	0.177371	0.086750	0.024607	0.005004	0.019215	0.027860	0.001385	0.001867	0.001946	0.000664	0.002226
Health Club	0.563301	0.087805	0.177371	0.086750	0.024607	0.005004	0.019215	0.027860	0.001385	0.001867	0.001946	0.000664	0.002226

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	62.5996	62.5996	2.5800e-003	5.3000e-004	62.8235
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	62.5996	62.5996	2.5800e-003	5.3000e-004	62.8235
NaturalGas Mitigated	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0962	17.0962	3.3000e-004	3.1000e-004	17.1978
NaturalGas Unmitigated	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0962	17.0962	3.3000e-004	3.1000e-004	17.1978

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	320370	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0962	17.0962	3.3000e-004	3.1000e-004	17.1978
Total		**1.7300e-003**	**0.0157**	**0.0132**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**17.0962**	**17.0962**	**3.3000e-004**	**3.1000e-004**	**17.1978**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	320370	1.7300e-003	0.0157	0.0132	9.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	17.0962	17.0962	3.3000e-004	3.1000e-004	17.1978
Total		**1.7300e-003**	**0.0157**	**0.0132**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**17.0962**	**17.0962**	**3.3000e-004**	**3.1000e-004**	**17.1978**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Health Club	196470	62.5996	2.5800e-003	5.3000e-004	62.8235
Total		**62.5996**	**2.5800e-003**	**5.3000e-004**	**62.8235**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Health Club	196470	62.5996	2.5800e-003	5.3000e-004	62.8235
Total		**62.5996**	**2.5800e-003**	**5.3000e-004**	**62.8235**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1204	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.6000e-003	2.6000e-003	2.0000e-005	0.0000	3.0400e-003
Unmitigated	0.1204	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.6000e-003	2.6000e-003	2.0000e-005	0.0000	3.0400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0205					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0996					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3000e-004	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.6000e-003	2.6000e-003	2.0000e-005	0.0000	3.0400e-003
Total	**0.1204**	**2.0000e-005**	**2.3700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.6000e-003**	**2.6000e-003**	**2.0000e-005**	**0.0000**	**3.0400e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0205					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0996					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.3000e-004	2.0000e-005	2.3700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.6000e-003	2.6000e-003	2.0000e-005	0.0000	3.0400e-003
Total	**0.1204**	**2.0000e-005**	**2.3700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**2.6000e-003**	**2.6000e-003**	**2.0000e-005**	**0.0000**	**3.0400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	373.8868	0.0495	4.0000e-003	376.3160
Unmitigated	373.8868	0.0495	4.0000e-003	376.3160

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Golf Course	0 / 103.659	366.9404	0.0152	3.1300e-003	368.2531

Health Club	1.04683 / 0.641608	6.9464	0.0344	8.6000e-004	8.0629
Total		**373.8868**	**0.0495**	**3.9900e-003**	**376.3160**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Golf Course	0 / 103.659	366.9404	0.0152	3.1300e-003	368.2531
Health Club	1.04683 / 0.641608	6.9464	0.0344	8.6000e-004	8.0629
Total		**373.8868**	**0.0495**	**3.9900e-003**	**376.3160**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.9038	2.1810	0.0000	91.4275
Unmitigated	36.9038	2.1810	0.0000	91.4275

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Golf Course	80.91	16.4240	0.9706	0.0000	40.6898
Health Club	100.89	20.4798	1.2103	0.0000	50.7377
Total		**36.9038**	**2.1810**	**0.0000**	**91.4275**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Golf Course	80.91	16.4240	0.9706	0.0000	40.6898
Health Club	100.89	20.4798	1.2103	0.0000	50.7377
Total		**36.9038**	**2.1810**	**0.0000**	**91.4275**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Kimmelman Foundation Center

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	23.00	1000sqft	0.53	23,000.00	0
General Office Building	10.00	1000sqft	0.23	10,000.00	0
General Office Building	3.00	1000sqft	0.07	3,000.00	0
General Office Building	13.00	1000sqft	0.30	13,000.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Library	25.00	1000sqft	0.57	25,000.00	0
Other Asphalt Surfaces	29.00	Acre	29.00	1,263,240.00	0
Other Non-Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Parking Lot	1,193.00	Space	10.74	477,200.00	0
City Park	58.00	Acre	58.00	2,526,480.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	588.29	**CH4 Intensity (lb/MWhr)**	0.024	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Operational year 2021. CO2 and CH4. Intensity factors based on SCE RPS data for 2021.

Land Use - Proposed land use data was provided by the project applicant.

Construction Phase - Construction phasing was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

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Off-road Equipment - Construction off-road equipment information was provided by the project applicant.

Trips and VMT - Construction trip data provided by the project applicant.

Grading - CalEEMod defaults.

Vehicle Trips - Week day and weekend trip rates are based on the trip generation values identified in the proposed project's traffic report.

Area Coating - parking lot area provided by the project applicant.

Energy Use - Additional energy use from outdoor lighting was captured under the parking lot land use.

Water And Wastewater - Water use based in information from the project applicant.

Construction Off-road Equipment Mitigation - use of Tier 4 final engines in construction equipment over 75 horsepower and
In compliance with SCAQMD Rule 402.
Water Mitigation - NA

Waste Mitigation - In compliance with AB 341.

Fleet Mix - CalEEMod defaults.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	107,040.00	104,426.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstructionPhase	NumDays	220.00	44.00
tblConstructionPhase	NumDays	3,100.00	132.00
tblConstructionPhase	NumDays	310.00	65.00
tblConstructionPhase	NumDays	310.00	45.00

tblConstructionPhase	NumDays	310.00	45.00
tblConstructionPhase	NumDays	220.00	153.00
tblConstructionPhase	NumDays	120.00	67.00
tblEnergyUse	LightingElect	0.00	0.32
tblEnergyUse	LightingElect	0.00	0.89
tblOffRoadEquipment	HorsePower	231.00	429.00
tblOffRoadEquipment	HorsePower	231.00	430.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.024
tblProjectCharacteristics	CO2IntensityFactor	702.44	588.29
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	HaulingTripNumber	0.00	10,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	132.00
tblTripsAndVMT	HaulingTripNumber	0.00	10,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	621.00
tblTripsAndVMT	HaulingTripNumber	0.00	460.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	44.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	719.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	1,838.00	50.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	5.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	368.00	30.00
tblVehicleTrips	CC_TTP	0.00	43.00
tblVehicleTrips	CC_TTP	0.00	43.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CNW_TTP	0.00	5.00
tblVehicleTrips	CW_TTP	0.00	52.00
tblVehicleTrips	CW_TTP	0.00	52.00

tblVehicleTrips	DV_TP	0.00	19.00
tblVehicleTrips	DV_TP	0.00	19.00
tblVehicleTrips	PB_TP	0.00	4.00
tblVehicleTrips	PB_TP	0.00	4.00
tblVehicleTrips	PR_TP	0.00	77.00
tblVehicleTrips	PR_TP	0.00	77.00
tblVehicleTrips	ST_TR	22.75	74.14
tblVehicleTrips	ST_TR	2.46	0.22
tblVehicleTrips	ST_TR	46.55	13.84
tblVehicleTrips	ST_TR	0.00	59.48
tblVehicleTrips	ST_TR	0.00	724.00
tblVehicleTrips	SU_TR	16.74	74.14
tblVehicleTrips	SU_TR	1.05	0.22
tblVehicleTrips	SU_TR	25.49	13.84
tblVehicleTrips	SU_TR	0.00	59.48
tblVehicleTrips	SU_TR	0.00	724.00
tblVehicleTrips	WD_TR	1.89	12.29
tblVehicleTrips	WD_TR	11.03	1.02
tblVehicleTrips	WD_TR	56.24	43.80
tblVehicleTrips	WD_TR	0.00	64.83
tblVehicleTrips	WD_TR	0.00	396.00
tblWater	IndoorWaterUseRate	9,597,622.39	9,500,000.00
tblWater	IndoorWaterUseRate	782,222.71	500,000.00
tblWater	OutdoorWaterUseRate	69,105,918.28	11,516,480.00
tblWater	OutdoorWaterUseRate	0.00	1,084,050.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.5765	7.9413	3.9660	0.0141	1.1021	0.2599	1.3620	0.5093	0.2405	0.7498	0.0000	1,329.3951	1,329.3951	0.1978	0.0000	1,334.3390
2020	0.8565	1.9364	1.9667	3.4800e-003	0.0551	0.1054	0.1604	0.0147	0.0980	0.1127	0.0000	307.9407	307.9407	0.0717	0.0000	309.7341
Maximum	**0.8565**	**7.9413**	**3.9660**	**0.0141**	**1.1021**	**0.2599**	**1.3620**	**0.5093**	**0.2405**	**0.7498**	**0.0000**	**1,329.3951**	**1,329.3951**	**0.1978**	**0.0000**	**1,334.3390**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1915	3.7147	3.8992	0.0141	0.5751	0.0206	0.5957	0.2382	0.0200	0.2582	0.0000	1,329.3946	1,329.3946	0.1978	0.0000	1,334.3385
2020	0.7052	0.5147	2.0966	3.4800e-003	0.0551	5.0700e-003	0.0601	0.0147	5.0200e-003	0.0197	0.0000	307.9404	307.9404	0.0717	0.0000	309.7338
Maximum	**0.7052**	**3.7147**	**3.8992**	**0.0141**	**0.5751**	**0.0206**	**0.5957**	**0.2382**	**0.0200**	**0.2582**	**0.0000**	**1,329.3946**	**1,329.3946**	**0.1978**	**0.0000**	**1,334.3385**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**37.43**	**57.18**	**-1.06**	**0.00**	**45.54**	**92.98**	**56.92**	**51.74**	**92.60**	**67.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	**7-1-2019**	**9-30-2019**	3.3828	1.6801
3	**10-1-2019**	**12-31-2019**	4.9947	2.1158
4	**1-1-2020**	**3-31-2020**	1.6027	0.4462
5	**4-1-2020**	**6-30-2020**	1.1703	0.7636

6	**7-1-2020**	**9-30-2020**	0.0108	0.0102
		Highest	4.9947	2.1158

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4876	1.6000e-004	0.0174	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0338	0.0338	9.0000e-005	0.0000	0.0360
Energy	5.4700e-003	0.0497	0.0418	3.0000e-004		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	875.6872	875.6872	0.0346	7.9800e-003	878.9276
Mobile	1.5416	8.6127	20.6872	0.0751	6.1088	0.0610	6.1699	1.6370	0.0570	1.6940	0.0000	6,932.6164	6,932.6164	0.3433	0.0000	6,941.1993
Waste						0.0000	0.0000		0.0000	0.0000	15.8800	0.0000	15.8800	0.9385	0.0000	39.3420
Water						0.0000	0.0000		0.0000	0.0000	3.1725	93.1681	96.3406	0.3297	8.4900e-003	107.1107
Total	**2.0346**	**8.6626**	**20.7464**	**0.0754**	**6.1088**	**0.0649**	**6.1737**	**1.6370**	**0.0608**	**1.6979**	**19.0525**	**7,901.5054**	**7,920.5579**	**1.6461**	**0.0165**	**7,966.6156**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4876	1.6000e-004	0.0174	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0338	0.0338	9.0000e-005	0.0000	0.0360
Energy	5.4700e-003	0.0497	0.0418	3.0000e-004		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	875.6872	875.6872	0.0346	7.9800e-003	878.9276
Mobile	1.5416	8.6127	20.6872	0.0751	6.1088	0.0610	6.1699	1.6370	0.0570	1.6940	0.0000	6,932.6164	6,932.6164	0.3433	0.0000	6,941.1993

Waste						0.0000	0.0000		0.0000	0.0000	3.9700	0.0000	3.9700	0.2346	0.0000	9.8355
Water						0.0000	0.0000		0.0000	0.0000	3.1725	65.6880	68.8606	0.3285	8.2500e-003	79.5330
Total	**2.0346**	**8.6626**	**20.7464**	**0.0754**	**6.1088**	**0.0649**	**6.1737**	**1.6370**	**0.0608**	**1.6979**	**7.1425**	**7,874.0253**	**7,881.1679**	**0.9411**	**0.0162**	**7,909.5314**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**62.51**	**0.35**	**0.50**	**42.83**	**1.46**	**0.72**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demo/Site prep/C&G	Site Preparation	8/1/2019	11/1/2019	5	67	
2	Trenching	Trenching	8/1/2019	11/1/2019	5	67	
3	Grading	Grading	9/1/2019	11/29/2019	5	65	
4	Building Construction	Building Construction	10/1/2019	4/1/2020	5	132	
5	Sport Surfaces and Paving	Paving	11/1/2019	6/2/2020	5	153	
6	Pile Driving	Grading	12/1/2019	1/31/2020	5	45	
7	Dynamic Compaction	Grading	12/1/2019	1/31/2020	5	45	
8	Architectural Coating	Architectural Coating	5/1/2020	7/1/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 130

Acres of Paving: 40.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 118,500; Non-Residential Outdoor: 39,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demo/Site prep/C&G	Rubber Tired Dozers	2	8.00	247	0.40
Demo/Site prep/C&G	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Sport Surfaces and Paving	Pavers	2	8.00	130	0.42
Sport Surfaces and Paving	Paving Equipment	2	8.00	132	0.36
Sport Surfaces and Paving	Rollers	2	8.00	80	0.38
Sport Surfaces and Paving	Sweepers/Scrubbers	2	8.00	64	0.46
Pile Driving	Cranes	1	8.00	429	0.29
Pile Driving	Excavators	0	0.00	158	0.38
Pile Driving	Graders	0	0.00	187	0.41
Pile Driving	Rubber Tired Dozers	0	0.00	247	0.40
Pile Driving	Scrapers	0	0.00	367	0.48
Pile Driving	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Pile Driving	Welders	1	8.00	46	0.45
Dynamic Compaction	Cranes	1	8.00	430	0.29
Dynamic Compaction	Excavators	0	0.00	158	0.38
Dynamic Compaction	Graders	0	0.00	187	0.41
Dynamic Compaction	Rubber Tired Dozers	0	0.00	247	0.40
Dynamic Compaction	Scrapers	0	0.00	367	0.48

Dynamic Compaction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demo/Site prep/C&G	5	20.00	0.00	10,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	6	20.00	4.00	132.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	10,500.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	50.00	6.00	621.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Sport Surfaces and Paving	8	30.00	0.00	460.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pile Driving	2	6.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Dynamic Compaction	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	2.00	44.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demo/Site prep/C&G - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4035	0.0000	0.4035	0.2218	0.0000	0.2218	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0994	1.0439	0.5185	8.8000e-004		0.0551	0.0551		0.0507	0.0507	0.0000	79.4255	79.4255	0.0251	0.0000	80.0538

Total	**0.0994**	**1.0439**	**0.5185**	**8.8000e-004**	**0.4035**	**0.0551**	**0.4586**	**0.2218**	**0.0507**	**0.2725**	**0.0000**	**79.4255**	**79.4255**	**0.0251**	**0.0000**	**80.0538**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0437	1.5770	0.3030	4.0900e-003	0.0903	5.7200e-003	0.0960	0.0248	5.4700e-003	0.0303	0.0000	400.2413	400.2413	0.0281	0.0000	400.9428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2400e-003	2.5700e-003	0.0279	8.0000e-005	7.3500e-003	6.0000e-005	7.4100e-003	1.9500e-003	5.0000e-005	2.0100e-003	0.0000	6.8293	6.8293	2.1000e-004	0.0000	6.8346
Total	**0.0469**	**1.5796**	**0.3309**	**4.1700e-003**	**0.0976**	**5.7800e-003**	**0.1034**	**0.0267**	**5.5200e-003**	**0.0323**	**0.0000**	**407.0706**	**407.0706**	**0.0283**	**0.0000**	**407.7774**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1574	0.0000	0.1574	0.0865	0.0000	0.0865	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.0469	0.4922	8.8000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	79.4254	79.4254	0.0251	0.0000	80.0537
Total	**0.0108**	**0.0469**	**0.4922**	**8.8000e-004**	**0.1574**	**1.4400e-003**	**0.1588**	**0.0865**	**1.4400e-003**	**0.0879**	**0.0000**	**79.4254**	**79.4254**	**0.0251**	**0.0000**	**80.0537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0437	1.5770	0.3030	4.0900e-003	0.0903	5.7200e-003	0.0960	0.0248	5.4700e-003	0.0303	0.0000	400.2413	400.2413	0.0281	0.0000	400.9428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2400e-003	2.5700e-003	0.0279	8.0000e-005	7.3500e-003	6.0000e-005	7.4100e-003	1.9500e-003	5.0000e-005	2.0100e-003	0.0000	6.8293	6.8293	2.1000e-004	0.0000	6.8346
Total	**0.0469**	**1.5796**	**0.3309**	**4.1700e-003**	**0.0976**	**5.7800e-003**	**0.1034**	**0.0267**	**5.5200e-003**	**0.0323**	**0.0000**	**407.0706**	**407.0706**	**0.0283**	**0.0000**	**407.7774**

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0622	0.5988	0.5497	7.8000e-004		0.0390	0.0390		0.0359	0.0359	0.0000	70.0518	70.0518	0.0222	0.0000	70.6059
Total	**0.0622**	**0.5988**	**0.5497**	**7.8000e-004**		**0.0390**	**0.0390**		**0.0359**	**0.0359**	**0.0000**	**70.0518**	**70.0518**	**0.0222**	**0.0000**	**70.6059**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	5.5000e-004	0.0198	3.8100e-003	5.0000e-005	1.1300e-003	7.0000e-005	1.2100e-003	3.1000e-004	7.0000e-005	3.8000e-004	0.0000	5.0316	5.0316	3.5000e-004	0.0000	5.0404
Vendor	5.3000e-004	0.0156	3.9200e-003	3.0000e-005	8.4000e-004	1.0000e-004	9.5000e-004	2.4000e-004	1.0000e-004	3.4000e-004	0.0000	3.3175	3.3175	2.3000e-004	0.0000	3.3232
Worker	3.2400e-003	2.5700e-003	0.0279	8.0000e-005	7.3500e-003	6.0000e-005	7.4100e-003	1.9500e-003	5.0000e-005	2.0100e-003	0.0000	6.8293	6.8293	2.1000e-004	0.0000	6.8346
Total	**4.3200e-003**	**0.0380**	**0.0357**	**1.6000e-004**	**9.3200e-003**	**2.3000e-004**	**9.5700e-003**	**2.5000e-003**	**2.2000e-004**	**2.7300e-003**	**0.0000**	**15.1783**	**15.1783**	**7.9000e-004**	**0.0000**	**15.1982**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5700e-003	0.0415	0.5899	7.8000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	70.0517	70.0517	0.0222	0.0000	70.6058
Total	**9.5700e-003**	**0.0415**	**0.5899**	**7.8000e-004**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.0000**	**70.0517**	**70.0517**	**0.0222**	**0.0000**	**70.6058**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.5000e-004	0.0198	3.8100e-003	5.0000e-005	1.1300e-003	7.0000e-005	1.2100e-003	3.1000e-004	7.0000e-005	3.8000e-004	0.0000	5.0316	5.0316	3.5000e-004	0.0000	5.0404
Vendor	5.3000e-004	0.0156	3.9200e-003	3.0000e-005	8.4000e-004	1.0000e-004	9.5000e-004	2.4000e-004	1.0000e-004	3.4000e-004	0.0000	3.3175	3.3175	2.3000e-004	0.0000	3.3232
Worker	3.2400e-003	2.5700e-003	0.0279	8.0000e-005	7.3500e-003	6.0000e-005	7.4100e-003	1.9500e-003	5.0000e-005	2.0100e-003	0.0000	6.8293	6.8293	2.1000e-004	0.0000	6.8346
Total	**4.3200e-003**	**0.0380**	**0.0357**	**1.6000e-004**	**9.3200e-003**	**2.3000e-004**	**9.5700e-003**	**2.5000e-003**	**2.2000e-004**	**2.7300e-003**	**0.0000**	**15.1783**	**15.1783**	**7.9000e-004**	**0.0000**	**15.1982**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4604	0.0000	0.4604	0.2226	0.0000	0.2226	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1581	1.7762	0.9521	1.7400e-003		0.0813	0.0813		0.0748	0.0748	0.0000	156.4268	156.4268	0.0495	0.0000	157.6641
Total	**0.1581**	**1.7762**	**0.9521**	**1.7400e-003**	**0.4604**	**0.0813**	**0.5417**	**0.2226**	**0.0748**	**0.2974**	**0.0000**	**156.4268**	**156.4268**	**0.0495**	**0.0000**	**157.6641**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0437	1.5770	0.3030	4.0900e-003	0.0903	5.7200e-003	0.0960	0.0248	5.4700e-003	0.0303	0.0000	400.2413	400.2413	0.0281	0.0000	400.9428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3500e-003	1.8700e-003	0.0203	6.0000e-005	5.3500e-003	4.0000e-005	5.3900e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.9691	4.9691	1.6000e-004	0.0000	4.9729
Total	**0.0460**	**1.5789**	**0.3233**	**4.1500e-003**	**0.0956**	**5.7600e-003**	**0.1014**	**0.0262**	**5.5100e-003**	**0.0317**	**0.0000**	**405.2104**	**405.2104**	**0.0282**	**0.0000**	**405.9157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1795	0.0000	0.1795	0.0868	0.0000	0.0868	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.0927	0.8457	1.7400e-003		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	156.4266	156.4266	0.0495	0.0000	157.6639
Total	**0.0214**	**0.0927**	**0.8457**	**1.7400e-003**	**0.1795**	**2.8500e-003**	**0.1824**	**0.0868**	**2.8500e-003**	**0.0897**	**0.0000**	**156.4266**	**156.4266**	**0.0495**	**0.0000**	**157.6639**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0437	1.5770	0.3030	4.0900e-003	0.0903	5.7200e-003	0.0960	0.0248	5.4700e-003	0.0303	0.0000	400.2413	400.2413	0.0281	0.0000	400.9428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3500e-003	1.8700e-003	0.0203	6.0000e-005	5.3500e-003	4.0000e-005	5.3900e-003	1.4200e-003	4.0000e-005	1.4600e-003	0.0000	4.9691	4.9691	1.6000e-004	0.0000	4.9729
Total	**0.0460**	**1.5789**	**0.3233**	**4.1500e-003**	**0.0956**	**5.7600e-003**	**0.1014**	**0.0262**	**5.5100e-003**	**0.0317**	**0.0000**	**405.2104**	**405.2104**	**0.0282**	**0.0000**	**405.9157**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0661	0.5671	0.5723	8.3000e-004		0.0363	0.0363		0.0343	0.0343	0.0000	72.5747	72.5747	0.0173	0.0000	73.0075

Total	**0.0661**	**0.5671**	**0.5723**	**8.3000e-004**		**0.0363**	**0.0363**		**0.0343**	**0.0343**	**0.0000**	**72.5747**	**72.5747**	**0.0173**	**0.0000**	**73.0075**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2900e-003	0.0466	8.9600e-003	1.2000e-004	4.6800e-003	1.7000e-004	4.8500e-003	1.2300e-003	1.6000e-004	1.3900e-003	0.0000	11.8357	11.8357	8.3000e-004	0.0000	11.8565
Vendor	7.8000e-004	0.0231	5.7900e-003	5.0000e-005	1.2500e-003	1.5000e-004	1.4000e-003	3.6000e-004	1.4000e-004	5.0000e-004	0.0000	4.9019	4.9019	3.4000e-004	0.0000	4.9104
Worker	7.9700e-003	6.3300e-003	0.0688	1.9000e-004	0.0181	1.4000e-004	0.0183	4.8100e-003	1.3000e-004	4.9400e-003	0.0000	16.8183	16.8183	5.3000e-004	0.0000	16.8315
Total	**0.0100**	**0.0761**	**0.0835**	**3.6000e-004**	**0.0240**	**4.6000e-004**	**0.0245**	**6.4000e-003**	**4.3000e-004**	**6.8300e-003**	**0.0000**	**33.5559**	**33.5559**	**1.7000e-003**	**0.0000**	**33.5983**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.1272	0.5853	8.3000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	72.5746	72.5746	0.0173	0.0000	73.0075
Total	**0.0115**	**0.1272**	**0.5853**	**8.3000e-004**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**	**0.0000**	**72.5746**	**72.5746**	**0.0173**	**0.0000**	**73.0075**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2900e-003	0.0466	8.9600e-003	1.2000e-004	4.6800e-003	1.7000e-004	4.8500e-003	1.2300e-003	1.6000e-004	1.3900e-003	0.0000	11.8357	11.8357	8.3000e-004	0.0000	11.8565
Vendor	7.8000e-004	0.0231	5.7900e-003	5.0000e-005	1.2500e-003	1.5000e-004	1.4000e-003	3.6000e-004	1.4000e-004	5.0000e-004	0.0000	4.9019	4.9019	3.4000e-004	0.0000	4.9104
Worker	7.9700e-003	6.3300e-003	0.0688	1.9000e-004	0.0181	1.4000e-004	0.0183	4.8100e-003	1.3000e-004	4.9400e-003	0.0000	16.8183	16.8183	5.3000e-004	0.0000	16.8315
Total	**0.0100**	**0.0761**	**0.0835**	**3.6000e-004**	**0.0240**	**4.6000e-004**	**0.0245**	**6.4000e-003**	**4.3000e-004**	**6.8300e-003**	**0.0000**	**33.5559**	**33.5559**	**1.7000e-003**	**0.0000**	**33.5983**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0595	0.5199	0.5671	8.3000e-004		0.0314	0.0314		0.0296	0.0296	0.0000	71.5306	71.5306	0.0171	0.0000	71.9571
Total	**0.0595**	**0.5199**	**0.5671**	**8.3000e-004**		**0.0314**	**0.0314**		**0.0296**	**0.0296**	**0.0000**	**71.5306**	**71.5306**	**0.0171**	**0.0000**	**71.9571**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	1.1900e-003	0.0436	8.6900e-003	1.2000e-004	4.6800e-003	1.4000e-004	4.8200e-003	1.2300e-003	1.3000e-004	1.3600e-003	0.0000	11.7158	11.7158	8.1000e-004	0.0000	11.7360
Vendor	6.6000e-004	0.0211	5.2300e-003	5.0000e-005	1.2500e-003	1.0000e-004	1.3500e-003	3.6000e-004	1.0000e-004	4.6000e-004	0.0000	4.8699	4.8699	3.2000e-004	0.0000	4.8778
Worker	7.3700e-003	5.6500e-003	0.0625	1.8000e-004	0.0181	1.4000e-004	0.0182	4.8100e-003	1.3000e-004	4.9400e-003	0.0000	16.2965	16.2965	4.7000e-004	0.0000	16.3082
Total	**9.2200e-003**	**0.0703**	**0.0764**	**3.5000e-004**	**0.0240**	**3.8000e-004**	**0.0244**	**6.4000e-003**	**3.6000e-004**	**6.7600e-003**	**0.0000**	**32.8821**	**32.8821**	**1.6000e-003**	**0.0000**	**32.9220**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.1272	0.5853	8.3000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	71.5305	71.5305	0.0171	0.0000	71.9570
Total	**0.0115**	**0.1272**	**0.5853**	**8.3000e-004**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**	**0.0000**	**71.5305**	**71.5305**	**0.0171**	**0.0000**	**71.9570**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1900e-003	0.0436	8.6900e-003	1.2000e-004	4.6800e-003	1.4000e-004	4.8200e-003	1.2300e-003	1.3000e-004	1.3600e-003	0.0000	11.7158	11.7158	8.1000e-004	0.0000	11.7360
Vendor	6.6000e-004	0.0211	5.2300e-003	5.0000e-005	1.2500e-003	1.0000e-004	1.3500e-003	3.6000e-004	1.0000e-004	4.6000e-004	0.0000	4.8699	4.8699	3.2000e-004	0.0000	4.8778
Worker	7.3700e-003	5.6500e-003	0.0625	1.8000e-004	0.0181	1.4000e-004	0.0182	4.8100e-003	1.3000e-004	4.9400e-003	0.0000	16.2965	16.2965	4.7000e-004	0.0000	16.3082
Total	**9.2200e-003**	**0.0703**	**0.0764**	**3.5000e-004**	**0.0240**	**3.8000e-004**	**0.0244**	**6.4000e-003**	**3.6000e-004**	**6.7600e-003**	**0.0000**	**32.8821**	**32.8821**	**1.6000e-003**	**0.0000**	**32.9220**

3.6 Sport Surfaces and Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0435	0.4343	0.4012	6.0000e-004		0.0264	0.0264		0.0243	0.0243	0.0000	53.8381	53.8381	0.0170	0.0000	54.2640
Paving	0.0146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0582**	**0.4343**	**0.4012**	**6.0000e-004**		**0.0264**	**0.0264**		**0.0243**	**0.0243**	**0.0000**	**53.8381**	**53.8381**	**0.0170**	**0.0000**	**54.2640**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0194	3.7300e-003	5.0000e-005	3.2500e-003	7.0000e-005	3.3200e-003	8.3000e-004	7.0000e-005	9.0000e-004	0.0000	4.9280	4.9280	3.5000e-004	0.0000	4.9366
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e-003	2.4700e-003	0.0269	7.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	6.5744	6.5744	2.1000e-004	0.0000	6.5796
Total	**3.6600e-003**	**0.0219**	**0.0306**	**1.2000e-004**	**0.0103**	**1.3000e-004**	**0.0105**	**2.7100e-003**	**1.2000e-004**	**2.8300e-003**	**0.0000**	**11.5024**	**11.5024**	**5.6000e-004**	**0.0000**	**11.5162**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7100e-003	0.0873	0.4545	6.0000e-004		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	53.8381	53.8381	0.0170	0.0000	54.2639
Paving	0.0146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0233**	**0.0873**	**0.4545**	**6.0000e-004**		**9.8000e-004**	**9.8000e-004**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**53.8381**	**53.8381**	**0.0170**	**0.0000**	**54.2639**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.4000e-004	0.0194	3.7300e-003	5.0000e-005	3.2500e-003	7.0000e-005	3.3200e-003	8.3000e-004	7.0000e-005	9.0000e-004	0.0000	4.9280	4.9280	3.5000e-004	0.0000	4.9366
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e-003	2.4700e-003	0.0269	7.0000e-005	7.0800e-003	6.0000e-005	7.1300e-003	1.8800e-003	5.0000e-005	1.9300e-003	0.0000	6.5744	6.5744	2.1000e-004	0.0000	6.5796
Total	**3.6600e-003**	**0.0219**	**0.0306**	**1.2000e-004**	**0.0103**	**1.3000e-004**	**0.0105**	**2.7100e-003**	**1.2000e-004**	**2.8300e-003**	**0.0000**	**11.5024**	**11.5024**	**5.6000e-004**	**0.0000**	**11.5162**

3.6 Sport Surfaces and Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1043	1.0296	1.0245	1.5300e-003		0.0620	0.0620		0.0570	0.0570	0.0000	134.7212	134.7212	0.0436	0.0000	135.8105

Paving	0.0374					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1417**	**1.0296**	**1.0245**	**1.5300e-003**		**0.0620**	**0.0620**		**0.0570**	**0.0570**	**0.0000**	**134.7212**	**134.7212**	**0.0436**	**0.0000**	**135.8105**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2700e-003	0.0464	9.2500e-003	1.3000e-004	3.6800e-003	1.5000e-004	3.8300e-003	9.9000e-004	1.4000e-004	1.1300e-003	0.0000	12.4787	12.4787	8.6000e-004	0.0000	12.5002
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3700e-003	5.6500e-003	0.0625	1.8000e-004	0.0181	1.4000e-004	0.0182	4.8100e-003	1.3000e-004	4.9400e-003	0.0000	16.2965	16.2965	4.7000e-004	0.0000	16.3082
Total	**8.6400e-003**	**0.0521**	**0.0717**	**3.1000e-004**	**0.0218**	**2.9000e-004**	**0.0221**	**5.8000e-003**	**2.7000e-004**	**6.0700e-003**	**0.0000**	**28.7752**	**28.7752**	**1.3300e-003**	**0.0000**	**28.8084**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0223	0.2233	1.1626	1.5300e-003		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	134.7211	134.7211	0.0436	0.0000	135.8104
Paving	0.0374					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0597**	**0.2233**	**1.1626**	**1.5300e-003**		**2.5100e-003**	**2.5100e-003**		**2.5100e-003**	**2.5100e-003**	**0.0000**	**134.7211**	**134.7211**	**0.0436**	**0.0000**	**135.8104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2700e-003	0.0464	9.2500e-003	1.3000e-004	3.6800e-003	1.5000e-004	3.8300e-003	9.9000e-004	1.4000e-004	1.1300e-003	0.0000	12.4787	12.4787	8.6000e-004	0.0000	12.5002
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3700e-003	5.6500e-003	0.0625	1.8000e-004	0.0181	1.4000e-004	0.0182	4.8100e-003	1.3000e-004	4.9400e-003	0.0000	16.2965	16.2965	4.7000e-004	0.0000	16.3082
Total	**8.6400e-003**	**0.0521**	**0.0717**	**3.1000e-004**	**0.0218**	**2.9000e-004**	**0.0221**	**5.8000e-003**	**2.7000e-004**	**6.0700e-003**	**0.0000**	**28.7752**	**28.7752**	**1.3300e-003**	**0.0000**	**28.8084**

3.7 Pile Driving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1216	0.0915	1.5000e-004		5.2700e-003	5.2700e-003		4.9400e-003	4.9400e-003	0.0000	12.6494	12.6494	3.6900e-003	0.0000	12.7417
Total	**0.0127**	**0.1216**	**0.0915**	**1.5000e-004**	**0.0000**	**5.2700e-003**	**5.2700e-003**	**0.0000**	**4.9400e-003**	**4.9400e-003**	**0.0000**	**12.6494**	**12.6494**	**3.6900e-003**	**0.0000**	**12.7417**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	2.0000e-005	7.3000e-004	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1864	0.1864	1.0000e-005	0.0000	0.1867
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.5000e-004	2.7500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6727	0.6727	2.0000e-005	0.0000	0.6733
Total	**3.4000e-004**	**9.8000e-004**	**2.8900e-003**	**1.0000e-005**	**8.0000e-004**	**1.0000e-005**	**8.1000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.8591**	**0.8591**	**3.0000e-005**	**0.0000**	**0.8599**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	0.0173	0.0696	1.5000e-004		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	12.6494	12.6494	3.6900e-003	0.0000	12.7417
Total	**1.9300e-003**	**0.0173**	**0.0696**	**1.5000e-004**	**0.0000**	**2.3000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**	**2.3000e-004**	**0.0000**	**12.6494**	**12.6494**	**3.6900e-003**	**0.0000**	**12.7417**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.3000e-004	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1864	0.1864	1.0000e-005	0.0000	0.1867
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.5000e-004	2.7500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6727	0.6727	2.0000e-005	0.0000	0.6733
Total	**3.4000e-004**	**9.8000e-004**	**2.8900e-003**	**1.0000e-005**	**8.0000e-004**	**1.0000e-005**	**8.1000e-004**	**2.1000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.8591**	**0.8591**	**3.0000e-005**	**0.0000**	**0.8599**

3.7 Pile Driving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.1155	0.0875	1.5000e-004		4.9100e-003	4.9100e-003		4.5900e-003	4.5900e-003	0.0000	12.9821	12.9821	3.8200e-003	0.0000	13.0775
Total	**0.0120**	**0.1155**	**0.0875**	**1.5000e-004**	**0.0000**	**4.9100e-003**	**4.9100e-003**	**0.0000**	**4.5900e-003**	**4.5900e-003**	**0.0000**	**12.9821**	**12.9821**	**3.8200e-003**	**0.0000**	**13.0775**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.2000e-004	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1932
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.4000e-004	2.6100e-003	1.0000e-005	7.6000e-004	1.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6815	0.6815	2.0000e-005	0.0000	0.6820
Total	**3.3000e-004**	**9.6000e-004**	**2.7500e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.4000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.8743**	**0.8743**	**3.0000e-005**	**0.0000**	**0.8752**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0200e-003	0.0181	0.0727	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.9821	12.9821	3.8200e-003	0.0000	13.0775
Total	**2.0200e-003**	**0.0181**	**0.0727**	**1.5000e-004**	**0.0000**	**2.4000e-004**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.9821**	**12.9821**	**3.8200e-003**	**0.0000**	**13.0775**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.2000e-004	1.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1929	0.1929	1.0000e-005	0.0000	0.1932
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.4000e-004	2.6100e-003	1.0000e-005	7.6000e-004	1.0000e-005	7.6000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6815	0.6815	2.0000e-005	0.0000	0.6820
Total	**3.3000e-004**	**9.6000e-004**	**2.7500e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.4000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.8743**	**0.8743**	**3.0000e-005**	**0.0000**	**0.8752**

3.8 Dynamic Compaction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	8.4500e-003	0.1039	0.0718	1.2000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	10.6036	10.6036	3.3500e-003	0.0000	10.6875
Total	**8.4500e-003**	**0.1039**	**0.0718**	**1.2000e-004**	**0.0000**	**4.1900e-003**	**4.1900e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**	**0.0000**	**10.6036**	**10.6036**	**3.3500e-003**	**0.0000**	**10.6875**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	1.8300e-003	0.0000	4.8000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4485	0.4485	1.0000e-005	0.0000	0.4488
Total	**2.1000e-004**	**1.7000e-004**	**1.8300e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.9000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4485**	**0.4485**	**1.0000e-005**	**0.0000**	**0.4488**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4500e-003	6.2900e-003	0.0532	1.2000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.6036	10.6036	3.3500e-003	0.0000	10.6875
Total	**1.4500e-003**	**6.2900e-003**	**0.0532**	**1.2000e-004**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**10.6036**	**10.6036**	**3.3500e-003**	**0.0000**	**10.6875**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.7000e-004	1.8300e-003	0.0000	4.8000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4485	0.4485	1.0000e-005	0.0000	0.4488
Total	**2.1000e-004**	**1.7000e-004**	**1.8300e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.9000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4485**	**0.4485**	**1.0000e-005**	**0.0000**	**0.4488**

3.8 Dynamic Compaction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.1100e-003	0.0977	0.0673	1.2000e-004		3.9200e-003	3.9200e-003		3.6000e-003	3.6000e-003	0.0000	10.8428	10.8428	3.5100e-003	0.0000	10.9304
Total	**8.1100e-003**	**0.0977**	**0.0673**	**1.2000e-004**	**0.0000**	**3.9200e-003**	**3.9200e-003**	**0.0000**	**3.6000e-003**	**3.6000e-003**	**0.0000**	**10.8428**	**10.8428**	**3.5100e-003**	**0.0000**	**10.9304**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	1.7400e-003	1.0000e-005	5.0000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4543	0.4543	1.0000e-005	0.0000	0.4547
Total	**2.1000e-004**	**1.6000e-004**	**1.7400e-003**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**5.1000e-004**	**1.3000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4543**	**0.4543**	**1.0000e-005**	**0.0000**	**0.4547**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5200e-003	6.5800e-003	0.0556	1.2000e-004		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	10.8427	10.8427	3.5100e-003	0.0000	10.9304
Total	**1.5200e-003**	**6.5800e-003**	**0.0556**	**1.2000e-004**	**0.0000**	**2.0000e-004**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**2.0000e-004**	**0.0000**	**10.8427**	**10.8427**	**3.5100e-003**	**0.0000**	**10.9304**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.6000e-004	1.7400e-003	1.0000e-005	5.0000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4543	0.4543	1.0000e-005	0.0000	0.4547
Total	**2.1000e-004**	**1.6000e-004**	**1.7400e-003**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**5.1000e-004**	**1.3000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4543**	**0.4543**	**1.0000e-005**	**0.0000**	**0.4547**

3.9 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3300e-003	0.0370	0.0403	7.0000e-005		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	5.6172	5.6172	4.3000e-004	0.0000	5.6280
Total	**0.6135**	**0.0370**	**0.0403**	**7.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.4400e-003**	**2.4400e-003**	**0.0000**	**5.6172**	**5.6172**	**4.3000e-004**	**0.0000**	**5.6280**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7000e-004	6.1700e-003	1.2300e-003	2.0000e-005	3.8000e-004	2.0000e-005	4.0000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	1.6602	1.6602	1.1000e-004	0.0000	1.6631
Vendor	1.5000e-004	4.7000e-003	1.1600e-003	1.0000e-005	2.8000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0822	1.0822	7.0000e-005	0.0000	1.0840
Worker	2.9500e-003	2.2600e-003	0.0250	7.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9700e-003	0.0000	6.5186	6.5186	1.9000e-004	0.0000	6.5233
Total	**3.2700e-003**	**0.0131**	**0.0274**	**1.0000e-004**	**7.9000e-003**	**1.0000e-004**	**8.0000e-003**	**2.1000e-003**	**9.0000e-005**	**2.1900e-003**	**0.0000**	**9.2610**	**9.2610**	**3.7000e-004**	**0.0000**	**9.2703**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5000e-004	2.8300e-003	0.0403	7.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	5.6172	5.6172	4.3000e-004	0.0000	5.6280
Total	**0.6088**	**2.8300e-003**	**0.0403**	**7.0000e-005**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**5.6172**	**5.6172**	**4.3000e-004**	**0.0000**	**5.6280**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7000e-004	6.1700e-003	1.2300e-003	2.0000e-005	3.8000e-004	2.0000e-005	4.0000e-004	1.0000e-004	2.0000e-005	1.2000e-004	0.0000	1.6602	1.6602	1.1000e-004	0.0000	1.6631
Vendor	1.5000e-004	4.7000e-003	1.1600e-003	1.0000e-005	2.8000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0822	1.0822	7.0000e-005	0.0000	1.0840
Worker	2.9500e-003	2.2600e-003	0.0250	7.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9700e-003	0.0000	6.5186	6.5186	1.9000e-004	0.0000	6.5233
Total	**3.2700e-003**	**0.0131**	**0.0274**	**1.0000e-004**	**7.9000e-003**	**1.0000e-004**	**8.0000e-003**	**2.1000e-003**	**9.0000e-005**	**2.1900e-003**	**0.0000**	**9.2610**	**9.2610**	**3.7000e-004**	**0.0000**	**9.2703**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Mitigated	1.5416	8.6127	20.6872	0.0751	6.1088	0.0610	6.1699	1.6370	0.0570	1.6940	0.0000	6,932.6164	6,932.6164	0.3433	0.0000	6,941.1993
Unmitigated	1.5416	8.6127	20.6872	0.0751	6.1088	0.0610	6.1699	1.6370	0.0570	1.6940	0.0000	6,932.6164	6,932.6164	0.3433	0.0000	6,941.1993

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	712.82	4,300.12	4300.12	5,000,482	5,000,482
General Office Building	23.46	5.06	5.06	58,640	58,640
General Office Building	10.20	2.20	2.20	25,496	25,496
General Office Building	3.06	0.66	0.66	7,649	7,649
General Office Building	13.26	2.86	2.86	33,144	33,144
General Office Building	5.10	1.10	1.10	12,748	12,748
Library	1,095.00	346.00	346.00	2,224,248	2,224,248
Other Asphalt Surfaces	1,880.07	1,724.92	1724.92	6,879,560	6,879,560
Other Non-Asphalt Surfaces	396.00	724.00	724.00	1,835,236	1,835,236
Parking Lot	0.00	0.00	0.00		
Total	4,138.97	7,106.92	7,106.92	16,077,202	16,077,202

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Library	16.60	8.40	6.90	52.00	43.00	5.00	44	44	12
Other Asphalt Surfaces	16.60	8.40	6.90	52.00	43.00	5.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	52.00	43.00	5.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
General Office Building	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Library	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Other Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Other Non-Asphalt Surfaces	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925
Parking Lot	0.548858	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.001877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	821.5421	821.5421	0.0335	6.9800e-003	824.4608
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	821.5421	821.5421	0.0335	6.9800e-003	824.4608
NaturalGas Mitigated	5.4700e-003	0.0497	0.0418	3.0000e-004		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	54.1451	54.1451	1.0400e-003	9.9000e-004	54.4668
NaturalGas Unmitigated	5.4700e-003	0.0497	0.0418	3.0000e-004		3.7800e-003	3.7800e-003		3.7800e-003	3.7800e-003	0.0000	54.1451	54.1451	1.0400e-003	9.9000e-004	54.4668

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	104100	5.6000e-004	5.1000e-003	4.2900e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5552	5.5552	1.1000e-004	1.0000e-004	5.5882
General Office Building	135330	7.3000e-004	6.6300e-003	5.5700e-003	4.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	7.2217	7.2217	1.4000e-004	1.3000e-004	7.2646
General Office Building	239430	1.2900e-003	0.0117	9.8600e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.7769	12.7769	2.4000e-004	2.3000e-004	12.8528
General Office Building	31230	1.7000e-004	1.5300e-003	1.2900e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.6666	1.6666	3.0000e-005	3.0000e-005	1.6765
General Office Building	52050	2.8000e-004	2.5500e-003	2.1400e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7776	2.7776	5.0000e-005	5.0000e-005	2.7941
Library	452500	2.4400e-003	0.0222	0.0186	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.1471	24.1471	4.6000e-004	4.4000e-004	24.2906
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.4700e-003**	**0.0497**	**0.0418**	**3.0000e-004**		**3.7800e-003**	**3.7800e-003**		**3.7800e-003**	**3.7800e-003**	**0.0000**	**54.1451**	**54.1451**	**1.0300e-003**	**9.8000e-004**	**54.4668**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	104100	5.6000e-004	5.1000e-003	4.2900e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5552	5.5552	1.1000e-004	1.0000e-004	5.5882
General Office Building	135330	7.3000e-004	6.6300e-003	5.5700e-003	4.0000e-005		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	7.2217	7.2217	1.4000e-004	1.3000e-004	7.2646
General Office Building	239430	1.2900e-003	0.0117	9.8600e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.7769	12.7769	2.4000e-004	2.3000e-004	12.8528
General Office Building	31230	1.7000e-004	1.5300e-003	1.2900e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.6666	1.6666	3.0000e-005	3.0000e-005	1.6765

General Office Building	52050	2.8000e-004	2.5500e-003	2.1400e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	2.7776	2.7776	5.0000e-005	5.0000e-005	2.7941
Library	452500	2.4400e-003	0.0222	0.0186	1.3000e-004		1.6900e-003	1.6900e-003		1.6900e-003	1.6900e-003	0.0000	24.1471	24.1471	4.6000e-004	4.4000e-004	24.2906
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.4700e-003**	**0.0497**	**0.0418**	**3.0000e-004**		**3.7800e-003**	**3.7800e-003**		**3.7800e-003**	**3.7800e-003**	**0.0000**	**54.1451**	**54.1451**	**1.0300e-003**	**9.8000e-004**	**54.4668**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	808474	215.7362	8.8000e-003	1.8300e-003	216.5027
General Office Building	129900	34.6630	1.4100e-003	2.9000e-004	34.7862
General Office Building	168870	45.0619	1.8400e-003	3.8000e-004	45.2220
General Office Building	298770	79.7249	3.2500e-003	6.8000e-004	80.0082
General Office Building	38970	10.3989	4.2000e-004	9.0000e-005	10.4359
General Office Building	64950	17.3315	7.1000e-004	1.5000e-004	17.3931
Library	277500	74.0492	3.0200e-003	6.3000e-004	74.3122
Other Asphalt Surfaces	1.12428e+006	300.0082	0.0122	2.5500e-003	301.0740
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	167020	44.5683	1.8200e-003	3.8000e-004	44.7266
Total		**821.5421**	**0.0335**	**6.9800e-003**	**824.4608**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	808474	215.7362	8.8000e-003	1.8300e-003	216.5027
General Office Building	129900	34.6630	1.4100e-003	2.9000e-004	34.7862
General Office Building	168870	45.0619	1.8400e-003	3.8000e-004	45.2220
General Office Building	298770	79.7249	3.2500e-003	6.8000e-004	80.0082
General Office Building	38970	10.3989	4.2000e-004	9.0000e-005	10.4359
General Office Building	64950	17.3315	7.1000e-004	1.5000e-004	17.3931
Library	277500	74.0492	3.0200e-003	6.3000e-004	74.3122
Other Asphalt Surfaces	1.12428e+006	300.0082	0.0122	2.5500e-003	301.0740
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	167020	44.5683	1.8200e-003	3.8000e-004	44.7266
Total		**821.5421**	**0.0335**	**6.9800e-003**	**824.4608**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4876	1.6000e-004	0.0174	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0338	0.0338	9.0000e-005	0.0000	0.0360
Unmitigated	0.4876	1.6000e-004	0.0174	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0338	0.0338	9.0000e-005	0.0000	0.0360

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4245					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6300e-003	1.6000e-004	0.0174	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0338	0.0338	9.0000e-005	0.0000	0.0360
Total	**0.4876**	**1.6000e-004**	**0.0174**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0338**	**0.0338**	**9.0000e-005**	**0.0000**	**0.0360**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0614					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4245					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	1.6300e-003	1.6000e-004	0.0174	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0338	0.0338	9.0000e-005	0.0000	0.0360
Total	**0.4876**	**1.6000e-004**	**0.0174**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0338**	**0.0338**	**9.0000e-005**	**0.0000**	**0.0360**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	68.8606	0.3285	8.2500e-003	79.5330
Unmitigated	96.3406	0.3297	8.4900e-003	107.1107

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 11.5165	34.1422	1.3900e-003	2.9000e-004	34.2635
General Office Building	9.5 / 5.88241	53.4616	0.3116	7.7400e-003	63.5579
Library	0.5 / 1.22348	5.5231	0.0165	4.3000e-004	6.0641

Other Asphalt Surfaces	0 / 1.08405	3.2138	1.3000e-004	3.0000e-005	3.2252
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**96.3406**	**0.3297**	**8.4900e-003**	**107.1107**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 6.09948	18.0828	7.4000e-004	1.5000e-004	18.1470
General Office Building	9.5 / 3.11551	45.2587	0.3113	7.6700e-003	55.3259
Library	0.5 / 0.647991	3.8170	0.0164	4.2000e-004	4.3519
Other Asphalt Surfaces	0 / 0.574146	1.7021	7.0000e-005	1.0000e-005	1.7082
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**68.8606**	**0.3285**	**8.2500e-003**	**79.5330**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.9700	0.2346	0.0000	9.8355
Unmitigated	15.8800	0.9385	0.0000	39.3420

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	4.99	1.0129	0.0599	0.0000	2.5095
General Office Building	50.22	10.1942	0.6025	0.0000	25.2557
Library	23.02	4.6729	0.2762	0.0000	11.5768
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.8800**	**0.9385**	**0.0000**	**39.3420**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.2475	0.2532	0.0150	0.0000	0.6274
General Office Building	12.555	2.5486	0.1506	0.0000	6.3139
Library	5.755	1.1682	0.0690	0.0000	2.8942
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**3.9700**	**0.2346**	**0.0000**	**9.8355**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX H

Site Assessment Report

Prepared for

Carol Kimmelman Center, LLC

Site Assessment Report

for the proposed **Carol Kimmelman Athletic & Academic Campus**
340 M.L.K. Jr. Street
Carson, California

Prepared by

Geosyntec consultants

engineers | scientists | innovators

2355 Northside Drive, Suite 250
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Geosyntec Project Number SC0918

May 2019

EXECUTIVE SUMMARY

This Executive Summary presents the results of the site assessment performed by Geosyntec Consultants (Geosyntec) at the location of the proposed project, the Carol Kimmelman Athletic & Academic Campus, at 340 Martin Luther King (M.L.K.) Jr. Street, in Carson, California (Figure 1; the Site). The Site is a portion of the existing Victoria Golf Course property (formerly, BKK Carson Dump) and includes an approximately 87-acre portion of the existing Victoria Golf Course property.

The objective of performing this site assessment was to identify and characterize the historical and current environmental conditions at the Site.

FINDINGS AND OPINIONS

The Site is located southwest of the intersection of M.L.K. Jr. Street and South Avalon Boulevard within a mixed use (commercial/industrial/residential) area (Figures 1 and 2). The Site was formerly operated as a landfill and is currently used for recreational purposes as a portion of the Victoria Golf Course. The balance of the Victoria Golf Course is located south and west of the Site. The Site is currently accessed from the northern portion of the Site along M.L.K. Jr. Street.

Currently, the Site is predominantly developed as a golf course, including grass fairways and greens, concrete cart paths, and a grass driving range. Structures and paved areas are in the northern portion of the Site (Figure 3). An approximately 2.3-acre asphalt-paved parking lot is present along the northern Site boundary. West of the parking lot are three adjoining structures used by the golf course as a clubhouse, multi-purpose room, and pro shop/administration building (including golf cart maintenance and storage). Methane vent risers were observed on the clubhouse and administration buildings. East of the parking lot is the golf course maintenance facility, including one structure used for equipment maintenance and office space, an outdoor equipment fueling area, chemical storage shed and container, bulk landscape materials storage, and unpaved equipment storage yard (Figure 4). Numerous landfill gas monitoring probes and groundwater monitoring wells are located onsite near the Site perimeter and in offsite areas.

Prior to use of the Site as a landfill, the Site and vicinity were marshland and agricultural land until the 1940s when residential and industrial development occurred in the Site vicinity, including partial construction of the Dominguez Channel south and west of the Site. The Site, along with adjoining areas west and south of the Site, were later used as an approximately 353-acre Class II and III landfill (formerly, BKK Carson Dump) which accepted waste from approximately 1948 to 1959. Wastes accepted included inert solid fill, household and commercial refuse (e.g., paper, wood, rubber, and paint sludge),

garbage, liquids and semi-liquids (e.g., drilling muds and printer's ink). An estimated 3 to 5 million tons of waste were deposited in the landfill that had no leachate collection system in place. Subsequently, the Rancho Angeles Trap & Skeet Club was also established in a leased area in the western portion of the Site and adjoining area in the mid-1960s. The landfill and shooting range were redeveloped into the existing Victoria Golf Course in approximately the late 1960's to 1970. In general, Site uses have remained consistent since 1970, with the exception of modifications to the clubhouse building to remove a gasoline underground storage tank (UST) and convert the golf cart system from gas to electric.

Extensive environmental investigation has been performed on site and off site since 1955 to assess the nature and extent of impacts related to historical operation of the landfill. Investigations have included evaluation of soil, groundwater, soil gas, ambient air, and surface water. Beginning in approximately 2006, under the direction of the California Department of Toxic Substances Control (DTSC), remedial investigation activities were implemented in the vicinity, including the Site, to inform the development of a Soil and Landfill Gas Remedial Action Plan (RAP) for a portion of the former landfill. Historical environmental assessments have identified methane, perchlorate, polychlorinated biphenyls (PCBs), aldehydes, chlorinated herbicides, organochlorine pesticides (OCPs), metals, fuel-related constituents, volatile organic compounds (VOCs), and semi-VOCs (SVOCs) as constituents of concern (COCs), and the findings of these assessments have been compiled in a Remedial Investigation/Feasibility Study (RI/FS) report [Leighton, 2014]. To facilitate RAP development, DTSC divided the former landfill property, including the Site and offsite areas, into two operable units. The investigation and cleanup remedies for soil and soil gas in each operable unit are being addressed independently. The two operable units are: Operable Unit 1 (OU-1), the former Dominguez Golf Course southwest of the Site, recently redeveloped as the Porsche Experience Center; and Operable Unit 2 (OU-2), the Goodyear Airship Operations Center, Former MB Nursery parcel, M.L.K Jr. Street, Victoria Regional Park, Cricket Fields, Victoria Golf Course, and Dominguez Channel. The Site area is limited to a portion of OU-2.

Based on the findings of the RI/FS, the Final RAP for OU-2 was completed and approved by DTSC on 22 June 2016. The RAP assumes that the use of the OU-2 land will be for public and private recreation, public infrastructure, landscape nursery, airship facility and as vacant land. The RAP did not identify environmental threats that constituted an immediate and substantial endangerment to human health or the environment, and the RAP did not trigger any interim or emergency response actions. The overall approach presented in the RAP is to continue to contain hazardous substances in place. The RI/FS and RAP determined that this approach will protect groundwater by minimizing infiltration of water to the waste zone, prevent direct human contact with the waste zone or contaminated soils, and provide adequate protection to prevent inhalation or

combustion of landfill gas. The RAP specifies four programs designed to facilitate containment, including: 1) institutional controls; 2) Operation Maintenance and Monitoring (OM&M) plans; 3) perimeter monitoring; and 4) location-specific remedial response actions which apply to specified, limited areas, all of which are outside the Site boundary.

Properties in the Site vicinity were historically used extensively for landfilling solid and liquid industrial hazardous substances and petroleum products. These include an offsite portion of the former BKK Carson Dump, the Gardena Valley Landfills, the Southwest Conservation Landfill, the Cal Compact Landfill, the Werdin Dump, and the Martin Adams Dump (Figure 2). As a result of historical landfilling and industrial activities, groundwater and soil vapor in the region have been impacted with hazardous substances and petroleum products. Many of the former landfills in the Site vicinity, including the former BKK Carson Dump, have been or are presently being redeveloped to include the Goodyear Airship Operations Center, Porsche Experience Center , an outlet mall, Interstate-405 Freeway, golf courses, residences, and other mixed uses. The former BKK Carson Dump itself and the former landfills in the Site vicinity have been or are presently being investigated and/or remediated under governmental oversight.

The site assessment performed by Geosyntec revealed no evidence of known or potential releases of hazardous substances and petroleum products in, on, or at the Site, except for the following:

- The Site and adjoining areas were operated as an unlined Class II and III landfill, accepting waste from 1948 to 1959, and were documented to have accepted an estimated 3 to 5 million tons of waste with no liner and no leachate collection system in place. Documented wastes included inert solid fill, household and commercial refuse (e.g., paper, wood, rubber, and paint sludge), garbage, liquids and semi-liquids (e.g., drilling muds and printer's ink). As a result, discharges and/or documented releases of hazardous substances and/or petroleum products to soil, soil vapor, ambient air, and, potentially, groundwater have occurred at the Site. The RAP for OU-2 at the Site specifies requirements to control impacts at the Site, including institutional and engineering controls, an OM&M plan, and perimeter monitoring. An interim OM&M plan is in place, but a complete OM&M plan has not been developed and approved by the DTSC. Furthermore, groundwater impacts from the landfill have not been addressed, and will be managed under an independent RAP at a later date.
- The golf course maintenance area in the northern portion of the Site was observed with oily staining on bare soil. The maintenance area is used primarily for servicing golf course landscaping equipment and includes a fueling area, chemical storage and mixing areas, a parts washer, washdown rack, and storage

of debris and decommissioned equipment. Hazardous substances and petroleum products observed included waste oil, used oil filters, unidentified 55-gallon drums of waste liquids, railroad ties, paints, fuels (diesel fuel and gasoline), new motor/hydraulic oil, fertilizers, herbicides, and fungicides. Additionally, the Site has been issued notices of violation (NOVs) by the Los Angeles County Fire Department (primarily administrative and compliance in nature). There is a potential that shallow soil impacts may be encountered in this immediate area.

- Offsite activities at numerous unlined waste disposal facilities and other industrial and fueling facilities in the Site vicinity have resulted in documented and/or potential releases of hazardous substances and petroleum products to groundwater and soil vapor in the Site vicinity. Groundwater at the Site may have been impacted by prior landfill operations at the Site, and upgradient sources have likely also caused groundwater and soil vapor impacts at the Site.

Additionally, the site assessment revealed the following past release that has been remediated to below applicable standards, and the government determined that no further action is needed and that no restriction on site use is needed:

- A former 1,000-gallon capacity gasoline UST was reported to have been on the Site near the equipment maintenance area. Removal of the UST and confirmation soil sampling for the UST and appurtenances were performed on 17 December 1997. Soil samples were collected under the observation of the Los Angeles County Department of Public Works (DPW). Samples were collected from below the bottom of the tank (approximately 11 feet below ground surface (bgs)), beneath the product pipeline, beneath the dispenser, and from the stockpiled soil excavated from above the tank. Soil samples did not contain detectable concentration of petroleum products with the exception of one soil sample collected from the bottom of the excavation, containing 249 mg/kg total petroleum hydrocarbons (TPH) as gasoline. The Los Angeles Regional Water Quality Control Board (RWQCB) determined in December 1998 that no further action was needed and granted regulatory closure (Case No. R 09857).

The following conditions were observed at the Site, but are not considered to present a threat to human health or the environment, and generally would not be the subject of an enforcement action:

The Rancho Angeles Trap & Skeet Club was formerly present in a leased area in the western portion of the Site in the mid-1960s. Given that significant investigation of soil at the Site was performed subsequent to operation of the Rancho Angeles Trap & Skeet

Club, any suspected impacts were likely characterized as part of the landfill RI/FS process, and addressed by the DTSC-approved RAP.

- A former 881-gallon capacity gasoline UST was reportedly operated at the Site near the Victoria Golf Course administration building's golf cart storage area. The UST was installed in the early 1960s and contained gasoline for refueling golf carts. The UST and associated fuel dispenser, located directly above the tank, were removed from service in 1987 as part of the Victoria Golf Course's conversion from gasoline to electric-powered golf carts. The tank was later rediscovered during construction activities related to renovations at the golf course in February 2001, and the single-wall, steel UST was removed on 14 March 2001. No free product was observed, no signs of contamination were evident in the tank excavation, and the tank was not observed with holes, corrosion, or signs of leakage. Confirmation soil samples were collected within the tank excavation and did not contain detectable concentrations of COCs. No release was noted, and the case was closed by the Los Angeles County DPW in August 2006.
- A recycled water injection manifold and associated ASTs were observed in the northeast portion of the Site. The ASTs were reported to include a 500-gallon liquid fertilizer tank and a 1,000-gallon liquid penetrant tank. The injection system was out-of-service, and tanks were generally empty. However, residual crystalline material was observed to be encrusted on the tank bottoms. The tanks were in poor condition, but no evidence of a release was noted.
- Active recycled water, natural gas, and crude oil pipelines were observed south of the Site. Although no reports or evidence of releases from the pipelines were identified, the potential exists for minor releases from the pipelines to have occurred. .
- From 1919 to 1959, the Dominguez Water Company reportedly operated drinking water well DWC-11 approximately 600 feet to the north of the southern Site boundary, within the Victoria Golf Course. Based on available information, the well was approximately 750 feet deep and was abandoned, but not destroyed.

In addition, the Montrose Chemical Superfund Site is located approximately 1.3 miles west of the Site and was documented to have released dichlorodiphenyltrichloroethane (DDT) through aerial dispersion, which may have had the potential to impact shallow soil at the Site. However, DDT has not been identified in shallow soil at the Site at hazardous concentrations.

The following mitigation measures are suggested to reduce the potential impacts of hazards and hazardous materials on the development of the proposed project:

- Prior to issuance of the first excavation or grading permit for project development, it should be confirmed that the DTSC has no objections to issuance of the excavation/grading permits.
- If excavation or grading occurs in areas with potential for residual contamination in the subsurface in the maintenance area (as shown on Figure 5), then a qualified environmental professional should screen soils in the identified area prior to excavation and grading based on the nature of the potential contamination. In the event that potential contamination is encountered the contamination should be evaluated by a qualified environmental professional using appropriate collection and sampling techniques as determined by the environmental professional based on the nature of the contamination. The nature and extent of contamination should be determined and the appropriate handling, disposal, and/or treatment should be implemented in accordance with applicable regulatory requirements.

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Proposed Carol Kimmelman Athletic & Academic Campus
340 Martin Luther King, Jr. Street, Carson, CA

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1. INTRODUCTION

This report documents the results of the site assessment performed by Geosyntec Consultants (Geosyntec) for the proposed Carol Kimmelman Athletic & Academic Campus at 340 M.L.K. Jr. Street, Carson, California (Figure 1; the Site). The Site comprises an approximately 87-acre portion of the existing Victoria Golf Course property (formerly, BKK Carson Dump), which is within an approximately 171-acre parcel of land identified by the Los Angeles County Assessors' Office as parcel number 7339-017-917.

1.1 Purpose

The purpose of this site assessment was to identify and characterize the historical and current environmental conditions at the Site. Geosyntec understands that this report may be used to help identify potential environmental impacts associated with the development and use of the Site for the proposed project.

1.2 Site Description

The Site is located at 340 M.L.K. Jr. Street, Carson, California; southwest of the intersection of M.L.K. Jr. Street and South Avalon Boulevard within a mixed use (commercial/industrial/residential) area (Figures 1 and 2). The Site has historically been associated with additional addresses, including 340 East 192nd Street and 19200 South Main Street. The Site comprises an approximately 87-acre portion of an approximately 171-acre parcel of land formerly operated as a Class II and III landfill, and is currently owned by the County of Los Angeles, and operated through its Department of Parks and Recreation. The Site is currently used for recreational purposes as a portion of the Victoria Golf Course. The balance of the Victoria Golf Course is located south and west of the Site.

1.2.1 Site Characteristics

The Site is currently accessed from the northern portion of the Site along M.L.K. Jr. Street. The Site is predominantly developed as a golf course, including grass fairways and greens, concrete cart paths, and a grass driving range. Structures and paved areas are in the northern portion of the Site (Figure 3). An approximately 2.3-acre asphalt-paved parking lot is present along the northern Site boundary. West of the parking lot are three adjoining structures used by the Victoria Golf Course as a clubhouse, multi-purpose room, and pro shop/administration building (including golf cart maintenance and storage) (Figure 4). East of the parking lot is the Victoria Golf Course maintenance facility, including one structure used for equipment maintenance and office space, an outdoor equipment fueling area, chemical storage shed and container, bulk landscape materials storage, and unpaved equipment storage yard (Figure 5).

Numerous landfill gas monitoring probes and groundwater monitoring wells are currently located on site near the Site perimeter and in offsite areas. Extensive environmental investigation has been performed on site and off site since 1955 to assess the nature and extent of impacts related to historical operation of the Site and offsite areas as a landfill. Beginning in approximately 2006, under the direction of the California Department of Toxic Substances Control (DTSC), remedial investigation activities were implemented at the Victoria Golf Course property, including the Site, to inform the development of a Remedial Action Plan (RAP). Historical environmental assessments have identified methane, perchlorate, polychlorinated biphenyls (PCBs), aldehydes, chlorinated herbicides, organochlorine pesticides (OCPs), metals, fuel-related constituents, volatile organic compounds (VOCs), and semi-VOCs (SVOCs) as constituents of concern (COCs), and the findings of these assessments have been compiled in a Remedial Investigation/Feasibility Study (RI/FS) report [Leighton, 2014]. DTSC divided the former landfill property, including the Site and offsite areas, into two operable units. The investigation and cleanup remedies for soil and soil gas in each operable unit are being addressed independently. The two operable units are: Operable Unit 1 (OU-1), the former Dominguez Golf Course portion southwest of the Site, recently redeveloped as the Porsche Experience Center; and Operable Unit 2 (OU-2), Goodyear Airship Operations Center, former MB Nursery parcel, M.L.K Jr. Street, Victoria Regional Park, Cricket Fields, the Victoria Golf Course, and Dominguez Channel. The Site area is limited to a portion of OU-2. Reportedly, groundwater issues throughout the former landfill property area, including the Site, will be addressed in a separate RAP.

1.2.2 Surrounding Land Uses

The Site is situated within a mixed-use area. A summary of pertinent nearby land uses is provided below:

- **North:** North of the Site across M.L.K. Jr. Street are the Victoria Regional Park and the Towne Avenue Elementary School, followed by residential properties.
- **Northwest:** Northwest of the Site are grass cricket fields and followed by the Dominguez Branch Channel and the former MB Nursery.
- **South:** South of the Site are offsite portions of the Victoria Golf Course. Further south is vacant land, the Macco Channel, a Mobil service station, Del Amo Boulevard, and several pipelines for recycled water, natural gas, and crude oil.
- **East:** East of the Site across Avalon Boulevard are residential properties.
- **West:** West of the Site is offsite portions of the Victoria Golf Course and the Dominguez Branch Channel. Further west is vacant land, the Goodyear Airship Operations Center, San Diego Freeway (I-405), and the approximately 250-foot

wide, concrete-lined Dominguez Channel. Further west is the former Dominguez Golf Course redeveloped as the Porsche Experience Center.

1.3 Geologic and Hydrogeologic Summary

The Site is located near the boundary of the Peninsular Ranges and Transverse Ranges physiographic provinces, within the central portion of the Los Angeles Basin. The dominant structural features of the Peninsular Ranges are northwesterly trending ranges, valleys, and fault zones such as the nearby Newport-Inglewood fault zone located approximately 1.4 miles northeast of the Site. In contrast, the Transverse Ranges are characterized by east-west trending structural features such as the Santa Monica Mountains and the Raymond fault located approximately 18 miles north of the Site. The Los Angeles Basin is an elongated northwest trending, sediment-filled structural trough. At the surface the basin is a low-relief, alluvial coastal plain that generally slopes toward the Pacific Ocean. Surficial geology in the Site vicinity has been characterized as Quaternary alluvial sediments [Harden, 1998]. Topography at the Site is undulating with depressions and grassy knolls, and elevations range from approximately 24 to 35 feet above Mean Sea Level (MSL) [GoogleEarthPro, 2018]. In general, the western portion of the Site drains westerly toward the Dominguez Branch Channel, and the eastern portion of the Site drains easterly towards storm drains near Avalon Boulevard.

The Site straddles the Gardena Valley/Dominguez Channel drainage system that dissects the Torrance Plain in the West Coast portion of the Los Angeles Basin of Los Angeles County [Leighton, 2014]. The Torrance Plain is comprised of the upper Pleistocene Lakewood Formation and overlying Quaternary-age sediments. The alluvium consists of gravel, sand, silt, and clay that were deposited from the erosion of nearby hills and mountains and from historic beaches and shallow ocean floors [DWR, 2004]. The portion of the Lakewood Formation located in the Torrance Plain consists of the Bellflower Aquitard and Gage Aquifer. The Bellflower Aquitard is characterized as low permeability, fine-grained sediments interbedded with poorly graded sand units of variable thicknesses. The Bellflower Aquitard exhibits perched groundwater at varying locations. Underlying this restrictive unit resides the coarse-grained Gage Aquifer which is encountered at approximately 230 feet below ground surface (bgs) [Leighton, 2014]. Separated by the Gage-Lynwood Aquitard, the San Pedro Formation underlies the Lakewood Formation. The San Pedro Formation includes the Lynwood and Silverado aquifers. Based on well logs for a groundwater well on an adjoining property, the top of the Lynwood Aquifer was encountered at approximately 300 ft bgs, and Silverado Aquifer was encountered at approximately 560 ft bgs [Leighton, 2014].

Soil borings advanced at the Site between 1955 and 2009 encountered cover fill, refuse, and alluvial deposits of the underlying Lakewood Formation. Cover fill ranges in

thickness from 2 to 15 feet. Refuse underlying cover soil ranges in thickness from 1 to 24 feet thick and extends down to a maximum depth of approximately 36.5 feet bgs. The native soil underlying the refuse generally consists of clay, silt, and fine to medium sand of the Pleistocene-age Lakewood Formation which extends to a depth of approximately 280 to 300 feet bgs. These materials have been characterized to occur as discontinuous lenses and interpreted as having been deposited in fluvial, marine, and aeolian environments [Leighton, 2014].

Three prior investigations of groundwater contamination beneath the BKK Landfill have been conducted. One of those investigations occurred in 1956 and focused on regional groundwater quality and groundwater elevations to aid in the regulation of waste disposal practices that could affect groundwater quality. The investigation conducted in 1997 and 2001 included collection of 23 groundwater samples from the Upper Bellflower Aquitard. Based on these data the DTSC determined that a release to groundwater had occurred and that further investigation of the BKK Landfill was warranted. It has been reported by the Water Replenishment District (WRD) that groundwater levels have been rising in the basin since management was initiated in the 1960s at the rate of approximately one foot annually for the last 30 years, which is consistent with onsite groundwater monitoring trends [TetraTech, 2014]. Groundwater model projections by the United States Geological Survey (USGS) indicate that groundwater levels are likely to continue to rise in the future before they stabilize near sea level [USGS, 2003]. Based on reported elevations of the bottom of onsite refuse and groundwater data [Leighton, 2014], waste at the Site has potential to come into contact with groundwater.

Groundwater at the Site within the Upper Bellflower Aquitard is first encountered at a depth of approximately 11.5 to 14.5 feet bgs in onsite groundwater monitoring wells [Leighton, 2014]. Based on available data, groundwater within the Upper Bellflower Aquitard flows to the southwest with an average hydraulic gradient of 0.004 ft/ft, and groundwater within the underlying Lakewood Formation generally flows to the south with hydraulic gradients ranging from 0.0002 to 0.007 ft/ft [Leighton, 2014].

1.4 Scope of Services

The site assessment included the following scope of services:

- Searching standard local, state, and federal environmental record sources within standard search distances;
- Reviewing available physiographic information including topographic, geologic, and hydrogeologic information;
- Reviewing historical aerial photographs;

- Reviewing historical fire insurance maps;
- Performing a Site reconnaissance; and
- Conducting an interview with the Site Manager.

This report was prepared by Mr. Steven Phillips, GIT, and reviewed by Mr. Douglas Baumwirt, PG, CHG and Ms. Karen Kosiarek, PE, of Geosyntec, in accordance with the peer and senior review policies of the firm. Mr. Baumwirt's and Ms. Kosiarek's professional qualifications are presented in Appendix A.

2. RECORDS REVIEW

2.1 General

The following sections present the results of the environmental database search and review of reasonably ascertainable historical aerial photographs, topographic maps, fire insurance maps, and historical city business directories.

2.2 Database Search Report

A database search report was obtained from Environmental Data Resources, Inc. (EDR) (Appendix C). The report documents findings of various federal, state, and local regulatory database searches regarding properties with known or suspected releases of hazardous materials or petroleum hydrocarbons. A list and description of the databases searched are included within Appendix C.

2.2.1 Site

The Site addresses were identified in several databases; a summary of pertinent listings is provided below:

- ENVIROSTOR, CORTESE, and RESPONSE: As of 2006, regulatory management for the Victoria Golf Course has been provided by DTSC. Confirmed COCs present at the Site include methane, perchlorate, various chlorinated VOCs, and fuel-related constituents. The Site was previously a landfill that accepted construction, domestic, and hazardous wastes. Significant environmental assessment has been performed at the Site.
- Los Angeles County HMS: The Victoria Golf Course is listed for Permit Nos. 000317910, 000311166, 00001184T, 0000T1184, and 000312954; the permits have been removed or closed.
- LUST: The Victoria Golf Course is listed as a former leaking underground storage tank (LUST) cleanup site. One underground storage tank (UST) was reported to have leaked petroleum products in 1997, and the case was closed by the RWQCB in 1998. The BKK Carson Landfill is listed with one leaking UST which reportedly impacted groundwater with diesel fuel in May 1995, and the case was closed in July 1998.
- HIST UST: The Victoria Golf Course is listed for one former 1,000-gallon capacity unleaded gasoline fuel UST.

- NPDES: The Site is registered in the National Pollutant Discharge Elimination System (NPDES) database for an active construction permit for Greenways Consulting, LLC beginning in July 2015. No violations at the Site were reported.

2.2.2 Adjoining Properties

Several adjoining properties were identified in the databases searched. Summaries of notable listings are provided below:

- Goodyear Airship Operations Center, located within the former BKK Carson Dump at 19200 South Main Street, adjoining the Site to the west, is listed in the Los Angeles Co. HMS, SWEEPS UST, ENVIROSTOR, VCP, EMI, SWF/LF, HIST CORTESE, NPDES, and CIWQS databases. The property is listed as a closed designated waste landfill (former BKK Carson Dump) which has accepted commercial, inert, liquid, and residential wastes since 1948. Additionally, the property is listed as an active Voluntary Cleanup site since January 2016 with oversight provided by Patrick Hsieh of DTSC. Previous site activities related to the former BKK Carson Dump have resulted in impacts to soil, groundwater, and soil gas similar to the impacts that are found or potentially present at the Site.
- The Towne Avenue Elementary School, located at 18924 Towne Avenue, adjoining north of the Site across M.L.K. Jr. Street, is listed in the ENVIROSTOR, SCH, FINDS, RCRA-LQG, and ECHO databases. The 10.5-acre property is listed as a school investigation site. Potential COCs include dichlorodiphenyldichloroethylene (DDE), lead, acetone, methylene chloride, and chromium VI. No further action (NFA) status was issued for the property in July 2006 following various environmental assessments. Additionally, no violations were reported for the property in the RCRA-LQG database.

2.2.3 Properties within ½-Mile of the Site

Several properties were identified in environmental records databases within ½-mile of the Site, including the ENVIROSTOR (9 properties), SLIC (8 properties), LUST (18 properties), HIST CORTESE (15 properties), DRYCLEANERS (6 properties), SWF/LF (12 properties), RCRA SQG (3 properties), and RCRA LQG (3 properties) databases. Summaries of notable database listings are presented below:

- Dominguez Golf Course, located within the former BKK Main Street Landfill at 19800 South Main Street, approximately 0.38 miles southwest of the Site, is listed in the LUST, LOS ANGELES CO. HMS, HAZNET, HIST CORTESE, VCP, and ENVIROSTOR databases. The property is listed as an active Voluntary Cleanup site with oversight managed by Daniel Zogaib of DTSC and

was previously used for landfill operations for the BKK Carson Dump. Historical operations resulted in impacts to soil, soil gas, and groundwater. Confirmed COCs include methane, various chlorinated VOCs, polychlorinated biphenyls (PCBs), and fuel-related constituents. One UST was reported to have leaked petroleum products in 1994, and the case was closed in 1998.

- Cal Compact Landfill, located at 20400 Main Street, approximately 0.45 miles southwest of the Site, is listed in the NPDES, WDS, CA BOND EXP. PLAN, HIST CORTESE, ENVIROSTOR, LDS, HIST CAL-SITES, CIWQS, LOS ANGELES CO. HMS, HAZNET, SWF/LF, and RESPONSE databases. The property is also identified as Carson Marketplace LLC, and is listed as the Cal Compact Landfill, a former Class II landfill which is reported to have operated from 1959 to 1968 that accepted at least 250,000 cubic yards of hazardous liquids and sludges. Previous investigations identified the presence of heavy metals, pesticides, organic resins, hydrocarbons, and solvents in soil and leachate at the property. As of 1986, regulatory management for the property was provided by Daniel Zogaib of the DTSC. Confirmed COCs present at the Site include PCBs, various chlorinated VOCs, and fuel-related constituents. DTSC indicated that there is a potential for contaminants to migrate to groundwater, surface water, and air. Reportedly, the landfill was capped with 3 to 20 feet of cover soil, but there was the potential for methane to migrate from the property. Contamination was found in the perched aquifer which may be hydrologically connected to deeper, drinking water aquifers. The maximum depth of fill is listed as 69 feet bgs. The property is adjacent to the Dominguez Channel, a waterway that flows to the Los Angeles Harbor; therefore, should landfill materials become exposed, they may be transported as rain runoff to the Channel. A Remedial Action Order was issued to 14 Potentially Responsible Parties in March 1988. Due to bankruptcy of the landowner, the Remedial Investigation did not start until September 1990. Additionally, the UIC database lists the property as having two onsite oil and gas wells.
- The Nat's Cleaners, located at 641 East University Drive, approximately 0.18 miles northeast of the Site, is listed in the FINDS, ENVIROSTOR, VCP, CIWQS, HAZNET, and DRYCLEANERS databases. The 1.9-acre property is reportedly an active Voluntary Cleanup site since April 2007. Historical dry-cleaning operations resulted in impacts to soil and groundwater. Potential COCs include VOCs. .
- Carson City Towing Service, located at 19135 Main Street South, approximately 0.32 miles northwest of the Site, is listed in the LUST and HIST CORTESE databases. The facility is listed with a closed Leaking UST case (Regional Board

case no. R-10383) with potential gasoline-fuel impacts to groundwater. Limited additional information is provided, and the case has been closed since June 1998.

- Mr. Jay's Cleaners located at 20232 South Avalon Boulevard, approximately 0.14 miles southeast of the Site, is listed in the FINDS, SLIC, HAZNET, EMI, LA CO. SITE MITIGATION, ECHO, and DRYCLEANERS databases. The facility is reported to have been a dry-cleaning facility which impacted the surrounding soil and groundwater with VOCs. The case was granted closure in June 1997 following clean-up of contaminated soil, and no further action is warranted.
- Jerry's Cleaners located at 516 Carson Plaza Court, approximately 0.3 miles south of the Site, is listed in the SLIC and Drycleaners databases. The facility is reported to have been in operation since 1960 and impacted the surrounding soil and groundwater with VOCs. However, the case has been closed and no further remedial action is planned for this property.
- Twelve additional properties located in the Site's vicinity are reported in the leaking UST database.

2.2.4 Properties within One Mile of the Site

Several properties were identified in significant environmental records databases within one mile of the Site. Summaries of notable database listings are presented below:

- GS Nursery, located at 20331 South Main Street, located approximately 0.72 miles southwest of the Site, is listed in the SWF/LF, VCP, LIENS, and ENVIROSTOR databases. Currently operated as a composting facility, the property was formerly operated as the Southwest Conservation Landfill. Prior to 1973, ownership included Four Corners Pipeline and Petroleum Lakes Glazer Company. Potential COCs include various VOCs. The landfill facility remains inactive and requires action.
- Rebel Mini Storage, located at 20501 South Main Street, located approximately 0.75 miles southwest of the Site, is listed in the DEED, ENVIROSTOR, and VCP databases. Past operation as a landfill has resulted in impacts to the property with elevated concentrations of metals and VOCs. A Preliminary Endangerment Assessment was completed in 2004 for which DTSC issued a Conditional NFA status for cleanup.
- The former Martin Adams Dump, located at 21111 Dolores Street, located approximately 0.88 miles southwest of the Site, is listed in the SWF/LF, CHMIRS, ENVIROSTOR, and SEMS databases. The property was formerly operated as a landfill and currently is used as a trailer park. Remedial

investigations concluded that methane gas and VOCs are potential COCs. A landfill gas (LFG) extraction system was installed in 1987 to mitigate methane gas generation and offsite migration.

- The Gardena Valley Landfill, located at 20740 South Figueroa and 101 West Torrance Boulevard, approximately 0.88 miles southwest of the Site, is listed for accepting large quantities of hazardous wastes including metals, chlorinated solvents, petroleum constituents, dichlorodiphenyl-trichloroethane (DDT), and vinyl chloride. Subsurface vapor reportedly contains various chlorinated solvent compounds and petroleum constituents. However, impacts to groundwater from the landfill have not been evaluated.
- The Del Amo Superfund Site is listed in the CERCLIS, NPL, ENVIROSTOR, DEED, PRP, SEMS, CORTESE, HIST CORTESE, ROD, and US ENG CONTROLS databases and is located at the intersection of Del Amo Boulevard and South Vermont Avenue (approximately 0.76 miles west of the Site). The former industrial facility was used from 1943 until 1972 primarily as a synthetic rubber manufacturing facility which resulted in releases of VOCs and other hazardous substances to soil and groundwater. The facility reportedly included a 500,000-gallon benzene tank and several waste pits. Although separate from the former Montrose Chemical Superfund site (located further west along Del Amo Boulevard), the two Superfund sites are typically grouped together due to their comingled groundwater plumes and dual-site operable unit remedial approach.
- The Montrose Chemical Corp. Superfund Site is located at 20201 S. Normandie, approximately 1.68 miles west of the Site; however, the delineation of the related impacts extends to within the Torrance Lateral channel and into the Dominguez Channel approximately three quarters of a mile south of the Site. The Montrose Superfund site is listed in the CERCLIS, NPL, ROD, PRP, SEMS, RCRA-LQG, and US ENG CONTROLS databases. The former chemical manufacturing facility produced DDT from 1947 until 1982, resulting in offsite releases of DDT to groundwater, stormwater, and soil through aerial dispersion.

2.2.5 Summary of Database Review

The Site address was identified in several databases for historical use as a landfill which accepted construction, domestic, and industrial waste. COCs present at the Site include methane, perchlorate, various chlorinated VOCs, and fuel-related constituents. The Site has been the subject of numerous environmental investigations and studies to mitigate impacts at the Site. Several properties in the Site vicinity were also identified in significant databases, including several adjoining and nearby landfills which were

reported to have received significant volumes of hazardous wastes. Historical operations at these facilities have resulted in impacts to soil, soil vapor, and groundwater in the Site vicinity.

Thirteen "orphan sites" were identified in the database, but insufficient information is available to accurately plot the locations of the sites. Based on the available information presented, the "orphan sites" do not appear to be located near the Site.

2.3 Historical Aerial Photographs and Topographic Maps

Historical aerial photographs (aerials) from 1928, 1938, 1947, 1952, 1963, 1970, 1977, 1983, 1989, 1994, 1998, 2002, 2005, 2009, 2012, and 2014 and USGS topographic maps ("topos") for years 1896, 1924, 1930, 1947, 1948, 1949, 1950, 1951, 1964, 1972, 1981, and 2012 were received from EDR and are provided in Appendices D and E, respectively. Geosyntec also reviewed aerials from 1952, 1963, 1972, 1980, 1994, 2003, 2004, 2005, 2009, 2010, 2012, and 2014, and topos for years 1896, 1899, 1905, 1910, 1916, 1922, 1924, 1926, 1927, 1930, 1939, 1953, 1959, 1966, 1975, 1982, and 2012 online at www.HistoricAerials.com; and aerials dated 1994, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2012, 2013, 2014, 2015, 2016, and 2017 on GoogleEarthPro [HistoricAerials.com, 2018; GoogleEarthPro, 2018]. A summary of historical Site use based on review of the aerials and topos is provided below.

- The earliest available topos from 1896 through 1948 indicate that the Site was undeveloped and partially within a marsh, with noted surface elevations ranging from 10 to 25 feet above Mean Sea Level (MSL). The 1928 aerial indicates that the Site was vacant land, and the Site vicinity was primarily used for agricultural purposes.
- By 1938, South Avalon Boulevard was established along the eastern Site boundary.
- By 1947, development had occurred in the vicinity, including dwellings and farms north of the Site. Southwest of the Site, the Dominguez Channel was present in a configuration similar to the present configuration.
- By 1952, landfill operations were in progress at the Site. The marsh at the Site appeared less expansive due to channelization related to the Dominguez Channel.
- By 1963, landfilling operations at the Site had ceased and the Site was graded. The Rancho Angeles Trap & Skeet Club shooting range was established in the western portion of the Site and extending off site. The Site vicinity was developed primarily into residential neighborhoods and a school. The San Diego Freeway (I-405) was established south of the Site.

- By 1970, the Site, including the shooting range, was redeveloped into the Victoria Golf Course. Two structures and an asphalt-paved parking lot were constructed in the northern portion of the Site, consistent with the existing onsite clubhouse and equipment and maintenance yard. In addition, East 192nd Street (currently known as M.L.K. Jr. Street) was present along the northern Site boundary. Further development of residential and commercial properties occurred in the Site vicinity, including service stations to the south of the Site.
- Between 1976 and 1981, several properties in the Site vicinity that previously underwent apparent landfilling activities had been redeveloped as parking lots, a drive-in movie theater, and a self-storage facility.
- Between 1970 and 2017, the Site remained generally consistent as the Victoria Golf Course and appeared similar to its present configuration. By 2016 the Dominguez Golf Course portion of the former BKK Carson Dump (OU-1) was redeveloped into the existing Porsche Experience Center.

2.4 Sanborn Maps

EDR conducted a search for Sanborn fire insurance maps for the Site area. Map coverage was not available for the area (Appendix F).

2.5 City Directories

City directories were searched by EDR for available years from 1920 to 2014 to assess occupancy at the Site and adjoining properties (Appendix G). The historical Site address (340 East 192nd Street) was listed with the following occupants:

- Los Verdes Golf Course and Victoria Golf Course in 1967;
- Los Angeles County Parks & Recreation Department Golf Courses in 1970, 1975, and 1980;
- Victoria Golf Course in 1985;
- National Golf & Tennis Inc. and Victoria Golf Course in 1990;
- Whittier Narrows Golf Course in 1995; and
- Victoria Golf Course in 2006.

An alternative historical Site address (19200 South Main Street) was listed as the Goodyear Tire & Rubber Co Blimp Base from 1970 to 2001, and as the BKK Disposal Company from 1950 to 1958. No other listings for the current Site address were identified. Listings for adjoining properties included various commercial properties.

Except for the Site's listing as a disposal facility from 1950 to 1958, no indications of environmental impairments for the Site or adjoining properties were identified in the available historical city directories.

2.6 Local Regulatory Agencies

Geosyntec contacted the following federal, state, and local agencies and accessed associated online databases to identify information pertaining to the Site. Pertinent documents obtained from the agencies are provided in Appendix B:

- USEPA and MyPropertyInfo database;
- California DTSC and EnviroStor database;
- California Department of Water Resources (DWR);
- California Division of Oil, Gas, Geothermal Resources (DOGGR) database;
- CalRecycle Solid Waste Information System (SWIS);
- Cal Fire – Office of the State Fire Marshall;
- Los Angeles Regional Water Quality Control Board (RWQCB) and GeoTracker database;
- South Coast Air Quality Management District (SCAQMD);
- Los Angeles County Department of Public Health – Public Health Investigator;
- Los Angeles County Department of Public Works;
- Los Angeles County Sanitation Districts;
- Los Angeles County Fire Department;
- City of Carson Building Department; and
- City of Carson Fire Department.

United States Environmental Protection Agency (USEPA)

On 11 June 2018 the USEPA indicated they had no records pertaining to the Site. However, the Site was identified in the USEPA's MyPropertyInfo database as the Victoria Golf Course. The Site is referenced as a solid waste landfill in the EIS database, a cleanup case in the EnviroStor database, and with a leaking storage tank in the GeoTracker database. Each cross-referenced listing is described in respective sections below.

California DTSC and EnviroStor Database

The DTSC indicated that the Site addresses are related to the Victoria Golf Course and former BKK Carson Dump at the Site and that files for the case exist at the DTSC office in Cypress, California. The DTSC indicated that approximately 85% of the records for the Site have been uploaded to EnviroStor, and that the department has voluminous records amounting to approximately seven feet of paper files. These hard copy records were not obtained and were not considered necessary or practically reviewable. Further, based on review of the voluminous files available on the EnviroStor database, sufficient documentation has been reviewed to identify releases or potential releases of hazardous substances and petroleum products to soil, groundwater, and soil vapor as a result of the former operation of the BKK Carson Dump at the Site.

Numerous reports, work plans, and regulatory correspondence are available for the Site on the EnviroStor database. The Site is listed as the Victoria Golf Course (former BKK Carson Dump) with an open case as of June 2006. The Victoria Golf Course property is a portion of the approximately 353-acre former BKK Class II & III landfill which accepted waste from 1948 to 1959. Wastes accepted included inert solid fill, household and commercial refuse (e.g., paper, wood, rubber, and paint sludge), garbage, liquids and semi-liquids (e.g., drilling muds and printer's ink). An estimated 3 to 5 million tons of waste were deposited in the unlined landfill that had no leachate collection system in place. After landfill operations ceased and the property was graded, I-405 was constructed through the landfill and the 275-acre parcel was redeveloped from 1962 to 1964 over the portion of the landfill north of I-405. The landfill property is currently occupied by the Victoria Golf Course, a portion of Victoria Regional County Park and associated cricket fields, the Goodyear Airship Operations Center, the former MB Nursery, M.L.K Jr. Street, and the Dominguez Branch Channel. In addition to landfill operations, USTs have been reported to have leaked at the property, and tanks and contaminated soil were removed. Environmental assessments performed at the property have identified methane, perchlorate, and VOCs as COCs.

Extensive site investigation has been performed on site and off site to assess the nature and extent of impacts related to historical operations at the Site. Summaries of key Site-related documents obtained from the EnviroStor database are provided below:

- Settlement Agreement and Consent Order – Victoria Golf Course Site (Former BKK Carson Dump) Carson, California – Department of Toxic Substances Control (DTSC) – 2006: A settlement agreement and consent order were established for OU-2 in 2006 between DTSC and several respondents. The stated purpose of the consent order was to avoid difficult and prolonged litigation and allow respondents to take certain response action to address releases or threatened releases of hazardous substances which present an

imminent and substantial endangerment to public health, welfare or the environment. The remedial action objectives specified in the consent order include: 1) protection of existing and potential beneficial uses of groundwater; and 2) development of remedial action objectives for contaminated media based on likely land uses (i.e., public recreation, public infrastructure, private recreation, landscape nursery, and vacant land) and provision of appropriate land uses covenants if environmental conditions remain which are not suitable for unrestricted land use. Respondents included responsible parties as defined in Health and Safety Code §25323.5, including the following:

- BKK Corporation as a former landfill owner;
- County of Los Angeles, Goodyear Tire and Rubber Company, Watson Land Company, and the City of Carson as current property owners of portions of the landfill; and
- County of Los Angeles, City of Los Angeles, and Shell Oil Company as entities which arranged for disposal of hazardous substances at the landfill.

Initially, a subset of the respondents executed the consent order. Los Angeles County and the City of Los Angeles signed the consent order in May and August 2006 to begin investigation and development of a remedial action plan (RAP) for OU-2. However, the other five parties did not sign the consent order. As a result, an enforcement order was issued by DTSC to these five parties on 12 October 2006 for the investigation and remediation of the property. Remedial investigation activities in OU-2 began in December 2006.

In February 2009 an amendment to the consent order was issued by DTSC to add eight additional parties which were identified to have arranged for disposal of hazardous materials at the landfill. These parties include the Cities of Compton, Culver City, El Segundo, Huntington Park, Long Beach, Lynwood, and Vernon, and the Palos Verdes Homes Association.

The consent order specifies that no change in ownership status relating to the landfill shall in any way alter the respondents' obligations under the consent order. Unless DTSC agrees that such obligations may be transferred to a third party, respondents shall be responsible for and liable for any failure to carry out all required activities

- Final Remedial Investigation/Feasibility Study for Soil and Landfill Gas Media – Former BKK Landfill, Carson Dump, OU-2, Carson, California – Leighton Consulting, Inc. (Leighton) – June 2014: Pursuant to the process established in the DTSC Consent Order, a RI/FS program was implemented to inform the development of the OU-2 RAP. Additionally, pursuant to CCR27, the Local

Enforcement Agency (LEA) has been conducting routine gas monitoring at the landfill. Investigations of the landfill, including the Site, began in 1955 and continued intermittently until completion of the RI/FS Report in 2014, which included a human health risk assessment (HHRA) and screening level ecological risk assessment (SLERA) [Leighton, 2014]. The RI/FS Report was the primary reference relied upon to inform the development of the RAP.

Land use, at the time of the investigation and assumed for future site use, includes public and private recreation (e.g., Victoria Regional Park and Victoria Golf Course), public infrastructure (e.g., Dominguez Channel, Dominguez Branch Channel, San Diego Freeway, roadways, etc.), landscape nursery, and vacant land. A summary of pertinent findings representative of current conditions at the Site is presented below:

- *Limits of Waste:* The lateral limits of the OU-2 waste zone enclose an area of approximately 180 acres. In general, waste does not underlie existing channels (i.e., Dominguez Branch Channel) or existing enclosed structures at the Site. Vertical assessment of waste identified the following:
  - Average soil cover thickness is approximately 7 feet, ranging from 2 to 15 feet;
  - Average waste thickness is approximately 15 feet, ranging from 1 to 24 feet; and
  - Average total depth from existing ground surface to the base of waste fill is approximately 22 feet, ranging from 10.5 to 36.5 feet bgs.
- *Soil Conditions:* Soil conditions include that of the cover, waste fill, and underlying native soil. Numerous investigations have been performed historically at the Site to evaluate soil conditions. The RI/FS program compiled and supplemented data collected from those investigations.
  - Soil cover samples identified localized areas with concentrations of constituents of potential concern (COPCs) above target health risk levels; however, considering the volume and depth of the COPC-affected soil and the similarity to background concentrations, COPCs in soil were not concluded to represent a significant health risk to exposed populations. Nevertheless, because the distribution of COCs in soil is not homogeneous throughout the Site, the potential exists for site workers (e.g., earthwork contractors) to encounter elevated concentrations of chemicals in soil.
  - Waste fill is not exposed at the surface at the Site but is known to exist as shallow as 2 feet bgs. If a route of exposure were to be complete for

waste zone materials, the detected concentrations of arsenic, benzene, and naphthalene would present an unacceptable risk to site workers or construction workers. Therefore, it was concluded that degradation of the soil cover should be prevented to mitigate potential exposure pathways.

- Native soil underlying the waste fill at the Site was identified with physical properties that have inhibited lateral and vertical migration of COPCs. Although localized concentrations of elevated COPCs were identified in native soil, those detections were concluded to not present an immediate threat to groundwater.
- The thickness of the waste fill, moisture content, waste type, and orientation of historical trenching and filling are factors that drive effects of waste decomposition, including differential settlement and LFG generation. Historical differential settlement at the Site trends in an east-west alignment in the northern portion of the Site, and a north-south orientation in the southern portion of the Site.

o *Soil Vapor/Landfill Gas Conditions:* Characterization of landfill gas and soil vapor included evaluation of methane and non-methane volatile organic compounds (NMVOCs). Sampling included collection of indoor and outdoor air samples from the Victoria Golf Course Clubhouse facilities and adjacent to residences on Milmore Avenue. Samples were also collected from a network of approximately 10 to 15 vapor monitoring wells at the Site, including soil vapor probes installed along the landfill perimeter and adjacent to the Victoria Golf Course Clubhouse. Summaries of pertinent findings are below:

- Large areas of OU-2 appear to have been subject to decomposition and LFG generation; however, the microbial degradation of the waste appears to be highly variable. Elevated methane concentrations are present in several areas of the Site, including in wells adjacent to the clubhouse and in perimeter probes.
- Indoor air samples did not exceed target risk levels. Specifically, a lack of detectable methane concentrations inside the existing clubhouse, despite elevated methane concentrations in underlying soil vapor, suggests that the existing building protection system for the clubhouse structure is effective.
- Outdoor air samples did not exceed target risk levels, suggesting that the landfill cover is effective.

- *Surface Water:* Surface water runoff sampling was limited to a total of nine samples due to low annual precipitation during the study period. Analytical results identified detectable concentrations of several landfill related COPCs (i.e., VOCs, semi-VOCs, aldehydes, chlorinated herbicides, cyanide, and metals). However, concentrations were generally below California Ocean Plan objectives for Human Health and Marine Aquatic Life except for beryllium, copper, and cyanide.
- *Groundwater Conditions:* Groundwater characterization data were not presented in the RI/FS report and will reportedly be presented later in a separate Groundwater RI/FS Report. However, landfill leachate was identified in localized areas of the Site containing VOCs, metals, chlorinated herbicides, hydrocarbons and/or free-product. Leachate was not encountered within 12 feet of the ground surface and was not identified to be seeping through the sides of the landfill, such as at the banks of the Dominguez Branch Channel.

- Remedial Action Plan for Soil and Landfill Gas Media – Former BKK Landfill, Carson Dump, OU-2, Carson, California –Burns & McDonnell – June 2016: The Final RAP for OU-2 was completed in June 2016 and approved by DTSC on 22 June 2016. The RAP addresses only soil (including the waste zone) and landfill gas media; groundwater is expected to be addressed later as a single unit for the former BKK Carson Dump. The RAP assumes that the use of the OU-2 land will be for public and private recreation, public infrastructure, landscape nursery, and vacant land. The RAP was developed based on the findings of the Final RI/FS [Leighton, 2014]. The results of the assessment did not identify environmental threats that constituted an immediate and substantial endangerment to human health or the environment, and no interim or emergency response actions were necessitated by the findings. The overall approach presented in the RAP is to continue to contain hazardous chemicals in place. This approach will reportedly protect groundwater by minimizing infiltration of water to the waste zone, prevent direct human contact with the waste zone or contaminated soils, and provide adequate protection to prevent inhalation or combustion of landfill gas. The RAP specifies four programs designed to facilitate containment, as summarized below:

1. *Institutional Controls* – To be implemented because hazardous substances will remain in OU-2 at levels unsuitable for unrestricted land use. Institutional controls include: land use covenants; operations, monitoring and maintenance plans; and landfill gas evaluations.
2. *OM&M Plans* – Property-specific OM&M Plans are required that present best management practices (BMPs) and schedules to address the following:

- Soil cover inspection and maintenance, with a focus on areas that are known to have cover less than three feet thick;
- Emergency response procedures for natural events that could degrade the soil cover;
- Maintaining soil cover thickness and establishing physical properties of imported soil;
- Providing for surface drainage to prevent soil erosion and to eliminate standing water that could percolate into the waste zone;
- Establishing soil and LFG sampling requirements to support excavation work;
- Establishing acceptable guidance for landscape irrigation;
- Identifying permitting and notification requirements for managing excavations;
- Conducting regular surface monitoring and perimeter LFG monitoring per SCAQMD Rule 1150.1; and
- Conducting onsite building perimeter well/probe and vent riser monitoring.

3. *Perimeter Monitoring* – To be implemented to monitor methane in soil gas wells along the OU-2 perimeter. Monitoring will include routine monitoring of specified existing wells along Avalon Boulevard, M.L.K. Jr Street and South Main Street, and installation of additional soil gas wells as needed.
4. *Location-Specific Remedial Response Actions* – To be implemented for areas identified in the RI/FS as Areas of Elevated Concentrations (AECs) e. However, no AECs (as defined in the RAP and RI/FS) are located within the footprint of the Site.

Apart from the Site itself, cases related to several nearby properties were identified in the EnviroStor database. A summary of pertinent findings is below:

- Carson Plaza – 641 East University Drive: The Carson Plaza is located approximately 0.2 miles northeast of the Site, and currently operates as a commercial shopping center. A portion of the property was formerly operated as Nat's Cleaners, a dry-cleaning facility. Historical dry-cleaning operations resulted in VOC impacts to groundwater. Various environmental investigations and remedial activities have occurred at the site, including groundwater and vapor extraction and six-phase heating. Groundwater at the property is encountered at approximately 25 feet bgs and flows to the northwest with an approximate hydraulic gradient of 0.016 ft/ft. Although groundwater sampling

showed decreases in VOCs throughout the property, the case remained open as of April 2007 with remediation and monitoring ongoing.

- Dominguez Golf Course – 19800 South Main Street: The former Dominquez Golf Course is located approximately 0.38 miles southwest of the Site and was recently redeveloped as the Porsche Experience Center. The property is a portion of the approximately 353-acre former BKK Class II & III landfill which accepted waste from 1948 to 1959. After landfill operations ceased and the property was graded, the I-405 was constructed through the landfill from 1960 to 1962, and the triangular 40.33-acre Dominguez Golf Course was constructed over the portion of the landfill south of I-405 in 1963. Additionally, a 550-gallon gasoline UST was removed in 1993 from the maintenance area. Previous investigations at the Site identified TPH, BTEX, methyl tert-butyl ether (MTBE), other VOCs and metals in soil; methane and VOCs in soil vapor; and TPH and VOCs in groundwater. As of the date of the property listing, redevelopment at the property was ongoing, and routine air monitoring was being performed.

- Cal Compact Landfill – 20400 Main Street: The Cal Compact Landfill is located approximately 0.45 miles southwest of the Site and is a former Class II landfill which operated from 1959 to 1968 that accepted at least 250,000 cubic yards of hazardous liquids and sludges. Previous investigations identified the presence of heavy metals, pesticides, organic resins, hydrocarbons, and solvents in soil and leachate at the Site. Contamination was found in the perched aquifer which may be hydrologically connected to deeper, drinking water aquifers.

- GS Nursery – 20331 Main Street: The GS Nursery is located approximately 0.72 miles southwest of the Site, and currently operates as a plant nursery and green-waste composting facility. A portion of the property was formerly operated as the Southwest Conservation Landfill at which municipal solid and liquid wastes were reportedly accepted from 1964 to 1968, although historical aerials indicate that the landfill was operating until at least 1972. The property has been the subject of several environmental investigations, including evaluation of LFG in 1998, which identified elevated concentrations of methane and vinyl chloride in soil vapor. Additionally, assessment performed in 2005 identified landfill waste materials in soil borings, and soil contained elevated concentrations of VOCs, pesticides, SVOCs, and asbestos. In 2008, the waste layer thickness was mapped at approximately 30 feet thick with an overlying soil cover approximately 11 feet thick. Soil cover, subsurface soil, and leachate samples contained detectable concentrations of VOCs, total petroleum hydrocarbons (TPH), SVOCs, PCBs, and metals. As of 2011, the case remains open and remedial action was required.

California Department of Water Resources (DWR)

DWR provided a well drillers log from 1919 which indicated that a 12"-diameter well was installed at the Site to a depth of approximately 750 feet bgs. Between 1919 and 1959, the Dominguez Water Company reportedly operated drinking water well DWC-11. The well was located approximately 600 feet to the north of the Site southern boundary, within the Victoria Golf Course. The well is reported as abandoned, but not destroyed.

California Division of Oil, Gas, Geothermal Resources (DOGGR) Database

Review of the DOGGR database on May 30, 2018 indicated the presence of three historical oil wells located downgradient and approximately 0.25 miles from the Site. The wells are identified as Del Amo-Bell 1, Dominguez Estates 1, and Del Amo 1. The wells were reportedly plugged and abandoned. No oil or gas wells were identified on site.

CalRecycle Solid Waste Information System (SWIS Database)

The BKK Public Dump is listed in the CalRecycle SWIS as a closed, pre-regulations, solid waste disposal site. The current LEA is listed as the Department of Public Health for the County of Los Angeles. The LEA is responsible for routine inspection and enforcement of State Minimum Standards of applicable sections of Title 27, California Code of Regulations (CCR27). Quarterly inspection reports state that the Site is well maintained with no evidence of subsidence or vegetative stress. Quarterly inspection includes evaluation of LFG concentrations at the ground surface and within existing probes to assess the cover effectiveness. Recent inspection reports indicate data consistent with the findings of the RI/FS, including detection of elevated methane concentrations in vapor probes, cracks in the landfill cap, and non-detectable concentrations of methane in the existing golf pro shop and restrooms. Historical violations have pertained to cracks in the landfill cap, standing water that requires cap maintenance, and damaged vapor probes that require repair.

Cal Fire – Office of the State Fire Marshal

The Office of the State Fire Marshal for Cal Fire indicated that various jurisdictional pipelines are present within 1,500 feet of the Site. However, no facilities, breakout tanks, or incidents are reportedly present within 1,500 feet of the Site.

Los Angeles Regional Water Quality Control Board (RWQCB) and GeoTracker Database

On 14 June 2018, the RWQCB indicated they had records for the Site. The following is a summary of notable documents provided by the RWQCB:

- Correspondence regarding a Gas Migration System Solid Waste Assessment Test for the Site from 1989 to 1991.
- Site Assessment report for the Site prepared by Bechtel Environmental, Inc. (BEI) dated March 1994.
- Initial Study report for the Site related to installation of a new irrigation system and golf course renovation, prepared by Sapphos Environmental and dated August 1996.
- Notice of Intent for a general storm water discharge permit related to construction activity for the Site dated October 2009.

In addition, the Site was identified in the RWQCB's GeoTracker database. The Site is listed as the LA Co. Victoria Golf Course at 340 East 192nd Street with a leaking UST case with potential non-petroleum hydrocarbon impacts to soil. Limited additional information is provided. The case was granted closure in February 1998.

Cases related to several nearby properties were identified in the GeoTracker database. A summary of pertinent findings is below:

- Nissan North America, Inc. – 125 West Griffith Street: The former Nissan North America, Inc. facility is located approximately 0.50 miles northwest of the Site and was utilized as an automobile junkyard prior to construction of the present-day facility. Historical operations resulted in VOC impacts to soil and groundwater at the property, and various environmental investigations have occurred at the property. In May 2013, shallow groundwater beneath the property was flowing in a south to southeast direction; however, subsequent monitoring events confirmed that groundwater flows to the northwest. Reportedly, there is an operating pump & treat groundwater remediation system approximately 750 feet northwest of the property. As of February 2015, the case remained open with semi-annual groundwater monitoring, an ongoing off-site groundwater investigation, and interim remedial measures on site, including ongoing operation of a soil vapor extraction system. Based on this property's location, it has the potential to have impacted the groundwater beneath the Site.

- Elixir Industries – 18037 South Broadway Avenue: The former Elixir Industries facility is located approximately 0.87 miles northwest of the Site, and operated businesses that produced paint, lacquer, glue, caulking, extruded aluminum products, doors, vents, and plastics between 1954 and 2004. Historical operations resulted in VOC impacts to soil and groundwater at the property. A NAPL plume and dissolved-phase groundwater plume were identified beneath the property following the reporting in 1984 of a leak associated with onsite USTs. In 1989,

16 USTs were removed, and one UST was abandoned in place. Elixir installed a groundwater pump-and-treat system at the property in 1992 to remove the NAPL and prevent further migration of the NAPL. The system operated from April 1992 until February 2007 and discharged approximately seven million gallons of treated effluent into the Dominguez Channel. Groundwater beneath the property reportedly flows to the northwest with a hydraulic gradient of 0.0027 ft/ft. As of December 2015, the case remained open with quarterly groundwater monitoring ongoing. Based on this property's location, it has a potential to have impacted the Site.

- 27 properties within a one-mile radius of the Site are documented with closed leaking UST cases, and 4 properties are documented with open cases. Additionally, 22 properties within a one-mile radius of the Site are documented with environmental cleanup cases. Based on the number of facilities, including upgradient locations, the potential exists for regionally impacted groundwater to adversely affect the Site.

South Coast Air Quality Management District (SCAQMD)

The SCAQMD responded on 20 July 2018 to indicate that they had records for the Site. A summary of notable documents provided is presented below:

- Permit to Construct/Operate an AST dated May 2001 and March 2016. Permits were issued to Victoria Golf Course for a dual compartment AST, including 1,000 gallons of gasoline and 500 gallons of diesel fuel.
- Facility Equipment List Report indicating one inactive Permit to Operate a gasoline dispenser (2001) and one active Permit to Operate a gasoline dispenser (2016).

A Notice of Violation was issued to Victoria Golf Course in December 2017 as a result of failure to submit the facility's monthly gasoline throughput data for the previous calendar year.

Los Angeles County Department of Public Health – Public Health Investigator

The Los Angeles County Department of Public Health indicated that as of 1 July 2017, files of concern are kept with the Los Angeles County Fire Department – Health Hazardous Materials Division (see below).

Los Angeles County Fire Department

The Los Angeles County Fire Department indicated they had records for the Site. A summary of notable documents provided is presented below:

- Consolidated Contingency Plan for the Site dated September 2009;
- Various Facility Information Reports for the Site from 2009 to 2012;
- Facility Inspection Report dated 10 June 2009 indicating violations for incomplete unified packet forms and failure to submit a Spill Prevention Control and Countermeasure (SPCC) plan for the onsite diesel fuel and gasoline above ground storage tanks (ASTs);
- Business Plan Annual Renewal Certification dated 24 January 2011;
- Facility Inspection Report, dated 17 October 2012, indicating that there have been various hazardous materials and waste storage at the Site. The violations were corrected shortly thereafter on 21 November 2012;
- Inspection Report dated 22 January 2016 indicating several notices of violation (NOV) for the Site. Violations have been generally related to improper storage and labeling of hazardous materials and wastes, inadequate documentation and personnel training, improper secondary containment, failure to establish a business plan and SPCC plan, and containers without lids.

Los Angeles County Department of Public Works

The Waste Management Division within the Los Angeles County Public Works indicated they had records pertaining to the Site. A summary of notable documents provided is presented below:

- Underground Storage Tank Removal Closure Report for the Site, dated April 2001, prepared by Geokinetics, Inc. The report details the removal and confirmation soil sampling for an 881-gallon capacity UST at the Site. The UST was originally installed in the early 1960s near the existing Cart Storage Building at the Victoria Golf Course which previously contained gasoline for refueling golf carts. The course reportedly switched to electric powered carts in approximately 1987, and the tank was removed from service at that time. A fuel dispenser located directly above the tank was also removed from service. The UST had reportedly been out of service for approximately 13 years prior to removal. The tank was discovered during construction activities related to renovations at the golf course in February 2001. The 881-gallon, single-wall, steel UST was removed on 14 March 2001 by JEM Industrial Services Company. Regulatory guidance for the removal was provided by the Los Angeles County Fire Department (LACFD). Reportedly, no free product was observed, and no signs of contamination were evident in the tank excavation. Additionally, there were no holes, corrosion or signs of leakage associated with the tank. No associated product piping was removed due to the dispenser being

located directly above the tank. As directed by the LACFD, a total of two tank-closure confirmatory soil samples were collected within the tank excavation and analyzed via EPA Methods 8260B, 418.1, and 6010B for: total recoverable petroleum hydrocarbons (TRPH); volatile fuel hydrocarbons; BTEX; MTBE; and total lead. The laboratory sample results indicated concentrations below laboratory detection limits for BTEX, MTBE, and volatile fuel hydrocarbons. However, lead and TRPH concentrations were detected and consistent with typical background levels at approximately 5 mg/kg and 9 mg/kg, respectfully. No further action was considered necessary.

- Underground Storage Tank Removal Closure Report for the Site, dated 2 January 1998, prepared by Harrison/Roberts Environmental Management. The report details the removal and confirmation soil sampling for a 1,000-gallon gasoline UST and related product supply line and dispenser at the Site on 17 December 1997. The UST was in the northern portion of the maintenance shop and maintenance equipment storage area at the Site. Soil samples were collected under the observation of Randall McDonald of the Los Angeles County Department of Public Works (DPW). Samples were collected from below the bottom of the tank invert (approximately 11 feet bgs), beneath the product pipeline (approximately 3 feet bgs), beneath the dispenser (approximately 3 feet bgs), and from the stockpiled soil excavated from above the tank. Reportedly, the stockpiled soil appeared to be contaminated with petroleum hydrocarbons and needed to be sampled prior to disposal. The samples were analyzed for gasoline by EPA Method 8020, and for BTEX and MTBE by EPA Method 8020. The samples were not detected at the laboratory limits exception for the soil sample collected from the bottom of the excavation which indicated 249 ppm of total petroleum hydrocarbon (TPH) as gasoline. No evidence of benzene or MTBE was detected in the sample; therefore, the consultant requested formal site closure from the Los Angeles County DPW. Approximately 41 tons of impacted soil from the soil stockpile was removed from the Site on 18 December 1997.
- Hazardous Materials Underground Storage Closure Certification letter for the Site prepared by the Los Angeles County Department of Public Works, dated 28 August 2006. The certification letter was based on the April 2001 UST closure report.
- Various hazardous materials system inspections related to a clarifier east of the golf cart washing area at the Site from 2003 to 2009.

<u>Los Angeles County Sanitation Districts</u>

The Los Angeles County Sanitation Districts (Industrial Waste Sector) indicated that they had no files related to the Site.

City of Carson Building Department

The City of Carson Building Department provided a Certificate of Occupancy dated January 2001 for the Site as the Victoria Golf Course. Records provided by the City of Carson Building Department also indicated the following permits were issued jointly for the Site by the City of Carson and County of Los Angeles, Department of Public Works:

- Building improvements in August 1997;
- Installation of an AST in July 1999;
- Building and parking lot additions and improvements in July 2001;
- Driving range construction in July 2001;
- Building remodeling in August 2001;
- Building improvements in September 2006;
- Demolition of a modular building in July 2008; and
- Construction of a modular building in December 2008.

City of Carson Fire Department

Communications with personnel of the City of Carson Fire Department indicated that files of concern would be kept with the lead agency, the Los Angeles County Fire Department – Health Hazardous Materials Division (see above).

2.7 Previous Site Assessment Reports

Previous site assessment reports for the Site were not obtained.

3. INTERVIEWS

The client facilitated an onsite meeting with Mr. Martín Perez, Golf Course Maintenance Superintendent for the Victoria Golf Course. Summaries of the interview conducted with Mr. Perez is presented below:

3.1 Interview of Site Manager

On 21 June 2018 Geosyntec interviewed Mr. Martín Perez, Golf Course Maintenance Superintendent for the Victoria Golf Course. During the interview, questions were asked regarding Site use and conditions. Mr. Perez indicated that he has been Superintendent for the Victoria Golf Course for approximately 15 years and is knowledgeable regarding Site conditions. When asked about property history, Mr. Perez indicated that the Site has been a golf course since he began working at the Site. Key elements of the interview are as follows:

- When asked about wells on the property, Mr. Perez indicated that he is not aware of any groundwater production wells present at the Site, but that numerous LFG and groundwater monitoring wells are located throughout the Site. He also indicated there is a reclaimed water injection system with four turbine pumps present in the northeast portion of the Site; however, the system is inactive.
- When asked about methane and exposed waste at the Site, Mr. Perez indicated he was not aware of any methane-related issues for the Site and has not seen areas of exposed waste. When asked about stressed vegetation, Mr. Perez indicated that certain fairways at the Site are more difficult to keep grass healthy, including fairways 13, 11, 6, and half of 4. When asked about areas at the Site where stormwater ponds, Mr. Perez reported minor pooling of storm water for fairway 13 and the front half of 2. When asked about fill material at the Site, Mr. Perez indicated that fill was imported to the Site for redevelopment of the onsite driving range. He also indicated that various soil and other earthen materials stockpiles are present throughout the Site for miscellaneous landscaping purposes.
- Geosyntec asked Mr. Perez about knowledge of hazardous substances or petroleum products at the Site. He explained that various hazardous substances for golf course and associated equipment maintenance are present in the maintenance shop and maintenance equipment storage area in the northern portion of the Site (further described in Section 5). Hazardous materials reportedly include fertilizers, pesticides, herbicides, fungicides, and some automotive degreasers.

- When asked about knowledge of tanks at the Site, Mr. Perez stated he was unaware of any USTs present at the Site but indicated that a 1,500-gallon capacity dual compartment AST containing up to 500 gallons of diesel fuel and 1,000 gallons of gasoline is present in the maintenance equipment storage area. When asked about disposal services for the maintenance area, Mr. Perez indicated Benny's Oil Filter Recycling disposes of the used oil and used oil filters for the Site.
- Mr. Perez reported that he had no further knowledge of any spills, leaks, or environmental incidents associated with the property.

3.2 Interview of State and/or Local Officials

State or local officials were not interviewed. Based on the availability of voluminous documents pertaining to the Site, including a DTSC-approved RAP, sufficient information was obtained for soil, groundwater, and soil vapor at the Site. Geosyntec's understanding of the regulatory status for the Site's lead agency is considered sufficient for the purpose of this site assessment, and the lack of interview is not considered a significant data gap.

4. SUMMARY OF SITE RECONNAISSANCE

4.1 Methodology

The following section summarizes observations made during the Site reconnaissance performed by Mr. Steven Phillips and Mr. Douglas Baumwirt of Geosyntec on 21 June 2018. The Site reconnaissance included a walking and driving survey of the Site with a representative from the Los Angeles County Department of Public Works, Mr. Ryan Kristan. The adjoining properties were inspected from public right-of-way. The Site layout and features as identified during the Site reconnaissance are depicted on Figures 3 through 5. Photographs taken during the Site reconnaissance are included in Appendix H.

4.2 Reconnaissance Observations

A summary of the reconnaissance observations is provided in Table 1. Notable observations are summarized below:

- The golf course maintenance area in the northern portion of the Site was observed with storage of hazardous substances and petroleum products. Impacts to shallow soil may be encountered in this area. Specific observations included the following:
    - Numerous 55-gallon drums were observed in the maintenance shop and maintenance equipment storage area in the northern portion of the Site. Various drums contained used oil and used gasoline filters. Many drums were unlabeled, without secondary containment, and stored on bare soil. Some of the unlabeled drums were empty while others were partially full containing unknown substances. Many of the drums were also in poor condition.
    - An active 1,500-gallon dual-compartment AST containing up to 500 gallons of diesel fuel and 1,000 gallons of gasoline was observed. The AST was within concrete secondary containment. Three additional approximately 70-gallon capacity metal tanks containing used oil were within the same secondary containment.
    - A parts washer was observed in the maintenance shop and maintenance equipment storage area in the northern portion of the Site. The washer was out-of-use but appeared to be oily and in poor condition.
    - A hazardous substances storage locker was observed in the maintenance shop and maintenance equipment storage area in the northern portion of the Site. Numerous containers and bags of pesticides, fungicides, herbicides,

and fertilizers were located within. No evidence of releases from the locker were observed.

- Electronic waste including miscellaneous discarded electronic devices and appliances were observed in the equipment storage area.
- Several railroad ties were observed in the maintenance equipment storage area. The railroad ties were used as dividers for bulk landscaping materials, among other uses.
- Oily staining was observed on the soil ground surface in the maintenance equipment storage area in the northern portion of the Site.

- Several methane vent risers were observed on portions of the clubhouse and cart storage building in the northern portion of the Site.
- Two irrigation water pipeline manifolds were observed in the northeast portion of the Site, including a recycled water system and potable water system. The systems are fitted with pumps to power irrigation to the golf course, including a recycled water injection system associated with a 500-gallon fertilizer tank and a 1,000-gallon penetrant tank. The injection system was out-of-service, and tanks were generally empty. However, residual crystalline material was observed to be encrusted on the tank bottoms. The tanks were in poor condition, but evidence of a release was not noted.
- Numerous LFG and groundwater monitoring wells were observed on site and in the Site vicinity.
- Erosion was observed at a storm drain located along the eastern Site boundary. The erosion undercut the opening of the drain to approximately eight feet bgs. No exposed waste was observed from the surface.
- Seepage was observed in areas of the Dominguez Branch Channel upgradient of the Site, south of M.L.K. Jr. Street. However, the portion of the Dominguez Branch Channel to the north of M.L.K. Jr. Street was observed dry with no surface water flow.
- Differential settlement was observed off site along M.L.K. Jr. Street and within the adjoining Victoria Park north of the Site.
- Active recycled water, natural gas, and crude oil pipelines were observed south of the Site.
- No exposed landfill waste was observed.

5. SUMMARY OF FINDINGS AND RECOMMENDED MITIGATION MEASURES

Geosyntec has performed a site assessment for the proposed Carol Kimmelman Athletic & Academic Campus, an approximately 87-acre portion of the existing Victoria Golf Course property (formerly, BKK Carson Dump) located at 340 M.L.K. Jr. Street, in Carson, California. This assessment has identified the following:

5.1 Site Conditions and Use

The Site is located southwest of the intersection of M.L.K. Jr. Street and South Avalon Boulevard within a mixed use (commercial/industrial/residential) area (Figures 1 and 2). The Site includes an approximately 87-acre portion of a 171-acre parcel of land formerly operated as a Class II and III landfill, and currently used for recreational purposes as a portion of the existing Victoria Golf Course. The balance of the Victoria Golf Course is located south and west of the Site. The Site is currently accessed from the northern portion of the Site along M.L.K. Jr. Street.

Currently, the Site is predominantly developed as a golf course, including grass fairways and greens, concrete cart paths, and a grass driving range. Structures and paved areas are in the northern portion of the Site (Figure 3). An approximately 2.3-acre asphalt-paved parking lot is present along the northern Site boundary. West of the parking lot are three adjoining structures used by the golf course as a clubhouse, multi-purpose room, and pro shop/administration building (including golf cart maintenance and storage). Methane vent risers were observed on the clubhouse and administration buildings. East of the parking lot is the golf course maintenance facility, including one structure used for equipment maintenance and office space, an outdoor equipment fueling area, chemical storage shed and container, bulk landscape materials storage, and unpaved equipment storage yard (Figure 4). Numerous landfill gas monitoring probes and groundwater monitoring wells are located onsite near the Site perimeter and in offsite areas.

Prior to use of the Site as a landfill, the Site and vicinity were marshland and agricultural land until the 1940s when residential and industrial development occurred in the Site vicinity, including partial construction of the Dominguez Channel south and west of the Site. The Site, along with adjoining areas west and south of the Site, were later used as an approximately 353-acre Class II and III landfill (formerly, BKK Carson Dump) which accepted waste from approximately 1948 to 1959. Wastes accepted included inert solid fill, household and commercial refuse (e.g., paper, wood, rubber, and paint sludge), garbage, liquids and semi-liquids (e.g., drilling muds and printer's ink). An estimated 3 to 5 million tons of waste were deposited in the unlined landfill that had no leachate collection system in place. Subsequently, the Rancho Angeles Trap & Skeet Club was

also established in a leased area in the western portion of the Site and adjoining area in the mid-1960s. The landfill and shooting range were redeveloped into the existing Victoria Golf Course in approximately the late 1960's to 1970. In general, Site uses have remained consistent since 1970, exception for modifications to the clubhouse building to remove a gasoline UST and convert to the golf cart system from gas to electric.

Extensive environmental investigation has been performed on site and off site since 1955 to assess the nature and extent of impacts related to historical operation of the Site and offsite areas as a landfill. Investigations have included evaluation of soil, groundwater, soil gas, ambient air, and surface water. Beginning in approximately 2006, under the direction of the DTSC, remedial investigation activities were implemented at the Site to inform the development of a RAP. Historical environmental assessments performed for OU-2 have identified methane, perchlorate, fuel-related constituents and VOCs as COCs, and the data have been compiled in a RI/FS report [Leighton, 2014]. To facilitate RAP development, DTSC divided the former landfill property, including the Site and offsite areas, into two operable units. The investigation and cleanup remedies for soil and soil gas in each operable unit are being addressed independently. The two operable units include: OU-1, the former Dominguez Golf Course portion southwest of the Site, recently redeveloped as the Porsche Experience Center; and OU-2, the Victoria Golf Course portion. The Site area is limited to a portion of OU-2. Reportedly, in addition to OU-1 and OU-2 to address soil and soil gas issues, groundwater issues throughout the former landfill property area, including the Site, will be addressed separately.

Based on the findings of the RI/FS, the Final RAP for OU-2 was completed and approved by DTSC on 22 June 2016. The RAP assumes that the use of the OU-2 land will be for public and private recreation, public infrastructure, landscape nursery, and vacant land. The RAP did not identify environmental threats that constituted an immediate and substantial endangerment to human health or the environment, and the RAP did not trigger any interim or emergency response actions. The overall approach presented in the RAP is to continue to contain hazardous substances in place. The RI/FS and RAP determined that this approach will protect groundwater by minimizing infiltration of water to the waste zone, prevent direct human contact with the waste zone or contaminated soils, and provide adequate protection to prevent inhalation or combustion of landfill gas. The RAP specifies four programs designed to facilitate containment, including: 1) institutional controls; 2) OM&M plans; 3) perimeter monitoring; and 4) location-specific remedial response actions which apply to specified, limited areas all of which are outside the Site boundary.

5.2 Offsite Conditions and Use

Properties in the Site vicinity were historically used extensively for landfilling solid and liquid industrial hazardous substances and petroleum products. These include the former BKK Main Street Landfill, the Gardena Valley Landfills, the Southwest Conservation Landfill, the Cal Compact Landfill, and the Werdin Dump and Martin Adams Dump. As a result of historical landfilling and industrial activities, groundwater and soil vapor in the region have been impacted with hazardous substances and petroleum products. Many of the former landfills in the Site vicinity (including the BKK Carson Dump itself) have been or are presently being redeveloped to include the Goodyear Airship Operations Center, Porsche Experience Center, an outlet mall, Interstate-405 Freeway, golf courses, residences, and other mixed uses. The former BKK Carson Dump itself and the former landfills in the Site vicinity have been or are presently being investigated and/or remediated under governmental oversight.

5.3 Data Gaps

Following investigation, it does not appear that significant data gaps exist for the Site. However, not all responses have been received as requested from regulatory agencies. If files are received after finalization of this report which change the conclusions herein, an addendum will be prepared.

5.4 Known or Potential Releases of Hazardous Substances and Petroleum Products

We have performed a site assessment for the proposed Carol Kimmelman Athletics & Academic Campus, which is an approximately 87-acre portion of the Victoria Golf Course property (formerly, BKK Carson Dump) located at 340 M.L.K. Jr. Street, Carson, California (Figure 3). This assessment has revealed no evidence of known or potential releases of hazardous substances and petroleum products in, on, or at the Site conditions in connection with the property, except for the following:

- The Site and adjoining areas were operated as an unlined Class II and III landfill, accepting waste from 1948 to 1959, and were documented to have accepted an estimated 3 to 5 million tons of waste with no liner and no leachate collection system in place. Wastes included inert solid fill, household and commercial refuse (e.g., paper, wood, rubber, and paint sludge), garbage, liquids and semi-liquids (e.g., drilling muds and printer's ink). As a result, discharges and/or documented releases of hazardous substances and/or petroleum products to soil, soil vapor, ambient air, and, potentially, groundwater have occurred at the Site. The RAP for the landfill at the Site specifies requirements to control impacts at the Site, including institutional and engineering controls, an OM&M plan, and

perimeter monitoring. An interim OM&M plan is in place, but a, a complete OM&M plan has not been developed and approved by the DTSC. Furthermore, potential groundwater impacts from the landfill will be addressed, and will reportedly be managed under an independent RAP at a later date.

- At a portion of the golf course maintenance area in the northern portion of the Site an area of bare soil with oily staining was observed. The maintenance area is used primarily for servicing of golf course landscaping equipment, and includes a fueling area, chemical storage and mixing areas, a parts washer, washdown rack, and storage of debris and decommissioned equipment. Hazardous substances and petroleum products observed included waste oil, used oil filters, unidentified 55-gallon drums of waste liquids, railroad ties, paints, fuels (diesel fuel and gasoline), new motor/hydraulic oil, fertilizers, herbicides, and fungicides. Additionally, the Site has been issued NOVs by the Los Angeles County Fire Department (primarily administrative and compliance in nature). Violations have been generally related to improper storage and labelling of hazardous materials and wastes, inadequate documentation and personnel training, improper secondary containment, failure to establish a business plan and SPCC plan, and containers without lids. Therefore, shallow soil impacts may be encountered in this immediate area.
- Offsite activities at numerous unlined waste disposal facilities and other industrial and fueling facilities in the Site vicinity have resulted in documented and/or potential releases of hazardous substances and petroleum products to groundwater and soil vapor in the Site vicinity. Groundwater at the Site may have been impacted by prior landfill operations at the Site, and upgradient sources have likely also caused groundwater and soil vapor impacts at the Site.

Additionally, the site assessment revealed the following past release that has been remediated to below applicable standards and the government determined that no further action is needed and that no restriction on site use is needed:

- A former 1,000-gallon capacity gasoline UST was reported to have been on the Site near the equipment maintenance area. Removal of the UST and confirmation soil sampling for the UST and appurtenances were performed on 17 December 1997. Soil samples were collected under the observation of the Los Angeles County DPW. Samples were collected from below the bottom of the tank (approximately 11 feet bgs), beneath the product pipeline, beneath the dispenser, and from the stockpiled soil excavated from above the tank. Soil samples did not contain detectable concentration of petroleum products with the exception of one soil sample collected from the bottom of the excavation, containing 249 ppm TPH as gasoline. The Los Angeles Regional Water Quality

Control Board (RWQCB) determined in December 1998 that no further action was needed and granted regulatory closure (Case No. R 09857).

5.5 Other Minimal Conditions

The following conditions were observed at the Site, but are not considered to present a threat to human health or the environment, and generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies:

- The Rancho Angeles Trap & Skeet Club was formerly present in a leased area in the western portion of the Site in the mid-1960s. Given that significant investigation of soil at the Site was performed subsequent to operation of the Rancho Angeles Trap & Skeet Club, any suspected impacts were likely characterized as part of the landfill RI/FS process, and addressed by the DTSC-approved RAP.
- A former 881-gallon capacity gasoline UST was reportedly operated at the Site near the golf course administration building's golf cart storage area. The UST was installed in the early 1960s and contained gasoline for refueling golf carts. The UST and associated fuel dispenser, located directly above the tank, were removed from service in 1987 as part of the golf course's conversion from gasoline to electric-powered golf carts. The tank was later discovered during construction activities related to renovations at the golf course in February 2001, and the single-wall, steel UST was removed on 14 March 2001. Reportedly, no free product was observed, no signs of contamination were evident in the tank excavation, and the tank was not observed with holes, corrosion, or signs of leakage. Confirmation soil samples were collected within the tank excavation and did not contain detectable concentration of BTEX, MTBE, or volatile fuel hydrocarbons. No release was noted, and the case was closed by the Los Angeles County DPW in August 2006.
- A recycled water injection manifold and associated ASTs were observed in the northeast portion of the Site. The ASTs were reported to include a 500-gallon liquid fertilizer tank and a 1,000-gallon liquid penetrant tank. The injection system was out-of-service, and tanks were generally empty. However, residual crystalline material was observed to be encrusted on the tank bottoms. The tanks were in poor condition, but no evidence of a release was not noted.
- Active recycled water, natural gas, and crude oil pipelines were observed south of the Site. No reports or evidence of releases from the pipelines were identified.
- The Montrose Chemical Superfund Site is located approximately 1.3 miles west of the Site and was documented to have released DDT through aerial dispersion,

which may have impacted shallow soil at the Site. However, DDT has not been identified in shallow soil at the Site at hazardous concentrations.

From 1919 to 1959, the Dominguez Water Company reportedly operated drinking water well DWC-11 approximately 600 feet to the north of the southern Site boundary, within the Victoria Golf Course. Based on available information, the well was approximately 750 feet deep and was abandoned but not destroyed as is required under current California Department of Water Resources policy

The following mitigation measures are suggested to reduce the potential impacts of hazards and hazardous materials on the development of the proposed project:

- Prior to issuance of the first excavation or grading permit for project development, it should be confirmed that the Department of Toxic Substances Control (DTSC) has no objections to issuance of the excavation/grading permits.
- If excavation or grading occurs in areas with potential for residual contamination in the subsurface in the maintenance area (as shown on Figure 5), then a qualified environmental professional should screen soils in the identified area prior to excavation and grading based on the nature of the potential contamination. In the event that potential contamination is encountered the contamination should be evaluated by a qualified environmental professional using appropriate collection and sampling techniques as determined by the environmental professional based on the nature of the contamination. The nature and extent of contamination should be determined and the appropriate handling, disposal, and/or treatment should be implemented in accordance with applicable regulatory requirements.

6. CERTIFICATION

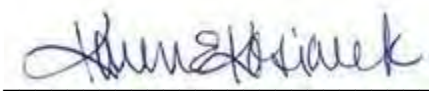
This site assessment was performed using the degree of care and skill ordinarily exercised under similar circumstances by environmental consultants practicing in this or similar localities. No other warranty or guarantee, expressed or implied, is made as to the findings, opinions, conclusions, and recommendations included in this report. The information and evaluations set forth in this report have been prepared in conformance with the professional standards of care applicable to the circumstances in which the report was prepared. The circumstances include the use of and reliance on information and data compiled by others over the course of time (a common occurrence in environmental projects).



5/3/2019

Douglas Baumwirt
California Professional Geologist No. 8745
California Certified Hydrogeologist No. 1044

Date



5/3/2019

Karen Kosiarek
California Professional Engineer No. C59218

Date

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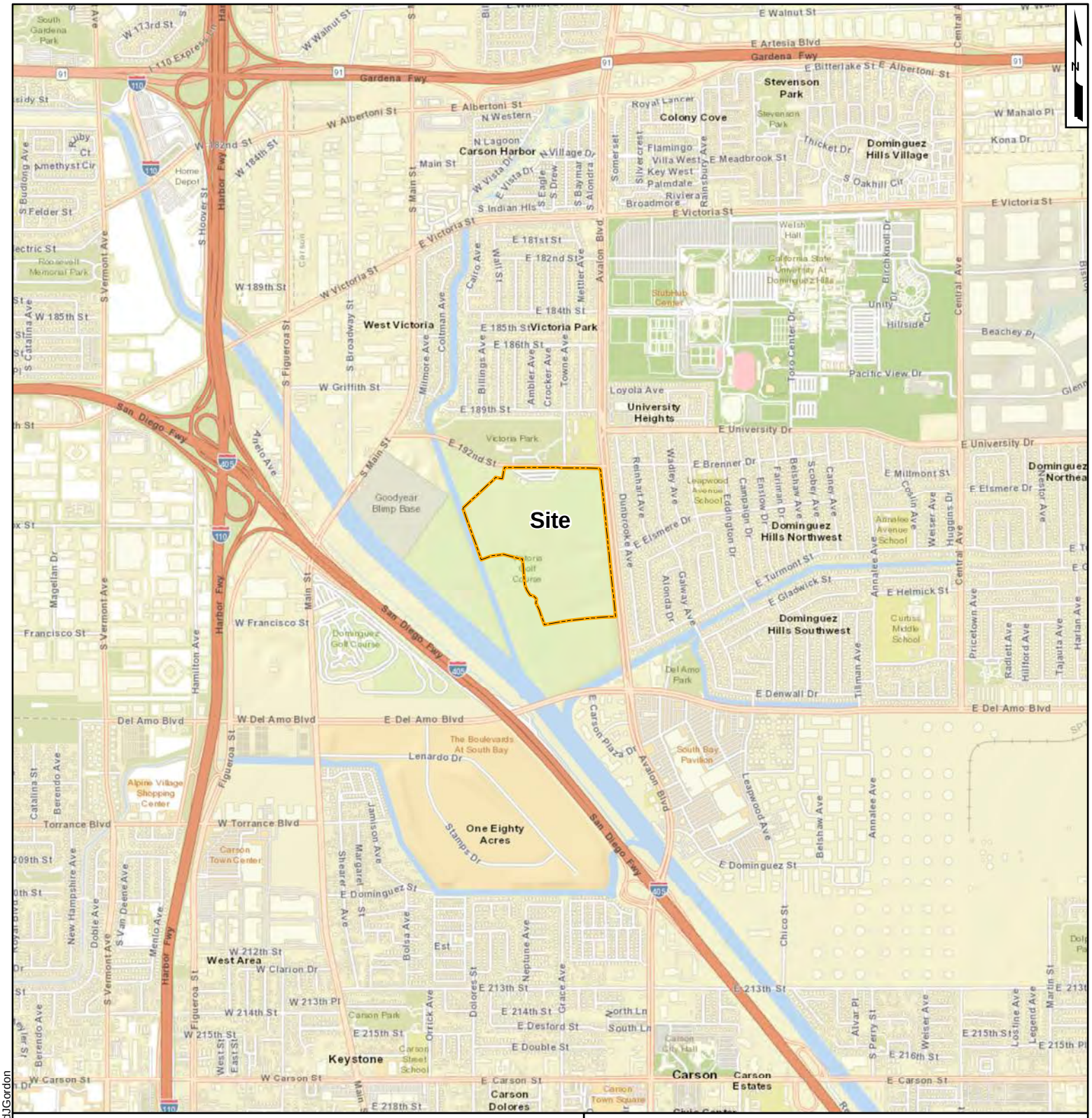
TABLE

TABLE 1

Summary of Site Reconnaissance
Victoria Golf Course
Carson, California

ASTM Section	Feature or Condition	Description
General Site Setting		
9.4.1.1 & 9.4.1.2	Current and Former Property Usage	The Site is currently used for recreational purposes as the Victoria Golf Course. Previously, the Site was used as an unlined Class II and III landfill. Prior to operation as a landfill, the Site was undeveloped land partially within a marsh. The Rancho Angeles Trap & Skeet Club shooting range was also established in a leased area in the western portion of the Site in the mid-1960s. The landfill and shooting range were redeveloped into the Victoria Golf Course in about 1970.
9.4.1.3 & 9.4.1.4	Current and Former Adjoining Property Usage	Adjoining properties have been redeveloped or are currently being redeveloped to include the Goodyear Blimp Base Airport, Porsche Experience Center, Interstate 405 Freeway, golf courses, residential neighborhoods, and other mixed uses. Historically, adjoining properties to the south, southwest, and west were operated as landfills. The adjoining properties to the north are currently the Victoria Regional Park and Town Avenue Elementary School, and were formerly used for agricultural purposes. The adjoining property to the northwest was formerly used as a plant nursery, but has since been regraded and is currently vacant.
9.4.1.5	Current and Former Use of Surrounding Area	The surrounding area is currently used for a mix of commercial, industrial, and recreational facilities. Historically, the Site vicinity was predominantly used for industrial purposes including numerous landfills, petroleum refineries, and chemical manufacturing facilities. However, prior to industrial development, the area was a marsh and was also used for agricultural purposes.
9.4.1.6	Geology, Hydrogeology, Hydrology, Topography of Site and Adjoining Properties	The majority of the Site is developed as a golf course with undulating topography characterized by depressions and grassy knolls. Surficial soil at the Site is cover fill consisting of sandy silt, clayey silt, and silty clay. A significant volume of waste fill is present at the Site ranging in thickness from 1 to 24 feet. Native subsurface soil underlying the Site consists primarily of clay, silt, and fine to medium sand of the Pleistocene-age Lakewood Formation. First groundwater is approximately 12 to 14 feet below ground surface and flows southerly.
9.4.1.7	Onsite Structures	Structures observed onsite included the clubhouse facilities and the maintenance shop in the northern portion of the Site. The clubhouse facilities consist of a pro shop, multi-purpose room, coffee shop/bar, and cart storage area. The cart storage area has a partially enclosed cart wash-down area. Numerous passive methane vent risers were observed on the exterior portions of the clubhouse and cart storage building. However, no passive methane vent risers were observed within the interior portions. Additionally, partially enclosed areas with awnings are present in the northeast portion of the Site which provide cover for the onsite irrigation systems and associated pumps.
9.4.1.8	Roads and Parking Areas	The Site is currently accessed by MLK Jr. Street on the north side of the property. A paved parking area is present in the northern portion of the Site. Concrete paved golf cart pathways traverse the Site for recreational golf use.
9.4.1.9	Potable Water supply	Water is supplied by the municipal source. Additionally, recycled water is used throughout the Site for irrigation purposes. An inactive reclaimed water injection system with four turbine pumps was observed in the northeast portion of the Site.
9.4.1.10 & 9.4.4.7	Sewage Disposal or Septic Systems	Sewage is discharged to the municipal sewer system.
Interior and Exterior Observations		
9.4.2.3 & 9.4.2.8	Hazardous Substances or Petroleum Products	Hazardous materials and petroleum products were observed onsite primarily in the maintenance shop and maintenance equipment storage area in the northern portion of the Site, including: gasoline and diesel fuel in the AST; motor oil, hydraulic oil, used oil, waste oil, and used oil filters in buckets, containers, tanks, and drums; household containers of fertilizers, herbicides, and fungicides in the poison storage locker; urea, iron, and ammonium sulfate in the inter-modal storage container; gasoline containers and paints in the flammable storage locker; electronic waste; and railroad ties. Additionally, a parts washer was observed in the maintenance shop and maintenance equipment storage area in the northern portion of the Site. The parts washer was out-of-use but appeared to be oily and in poor condition.
9.4.2.4	Underground Storage Tanks	No USTs or evidence of USTs were observed at the Site.
9.4.2.4	Above-ground Storage Tanks	One 1,500-gallon capacity dual compartment AST containing 500 gallons of diesel fuel and 1,000 gallons of gasoline and within concrete secondary containment was observed in the maintenance shop and maintenance equipment storage area in the northern portion of the Site. Three 70-gallon capacity metal tanks containing used oil were also within the same secondary containment. Two plastic ASTs were observed in the northeast portion of the Site, include one 1,000-gallon tank labelled to contain "penetrant" and one 500-gallon tank labelled to contain fertilizer. However, both plastic tanks were empty with the exception of crystalline residual in the tank bottoms.
9.4.2.5	Odors	No odors were noted.
9.4.2.6	Pools of Liquids	No pools of liquid were observed, except for small amounts of water in the Dominguez Branch Channel offsite.
9.4.2.7	Drums and Containers > 5 Gallons	Approximately 10 drums of non-hazardous irrigation water waste, 2 unlabeled metal drums (one empty and the other partially fully), 1 open bucket of waste oil, multiple empty and unlabeled drums, and 3 drums of used oil and used gasoline filters were observed in the maintenance shop and maintenance equipment storage area in the northern portion of the Site. Many drums were unlabeled, and with improper containment. Many of the drums were also in poor condition. One 55-gallon drum of grease was observed on a pallet located outside the onsite bar, likely related to kitchen activities.
9.4.2.9	Unidentified Substances/Containers	No additional unidentifiable substances or containers were observed at the Site, with the exception of one partially full and unlabeled 55-gallon drums that appeared to be used oil located in the maintenance equipment storage area.
9.4.2.10	PCB Items	No items containing PCBs were observed.
Interior Observations		
9.4.3.1	Heating and Cooling Systems	Heating and cooling systems were observed for the building structures located in the northern portion of the Site. Systems appeared to utilize electricity and/or natural gas, and did not appear to use heating oil.
9.4.3.2	Stains/Corrosion	No significant staining was for the interior portions of the Site. However, widespread oily staining was observed on the ground surface, including bare soil, in the maintenance shop and maintenance equipment storage area in the northern portion of the Site.
9.4.3.3	Drains and Sumps	No sumps were observed onsite. A floor drain was observed in the golf cart wash-down area adjacent to the golf cart storage area in the northern portion of the Site. No significant staining was observed near the golf cart wash down drain.
Exterior Observations		
9.4.4.1	Pits, Ponds, or Lagoons (Onsite and Adjoining)	No pits, ponds, or lagoons were observed on the Site. However, minor pooling of water was observed offsite in the southern portion of the Victoria Golf Course. Various fairways at the Site are reported to pool following precipitation events, including fairways 13 and the front half of 2.
9.4.4.2	Stained Soil or Pavement	Widespread oily staining was observed on the ground surface, including bare soil, in the maintenance shop and maintenance equipment storage area in the northern portion of the Site.
9.4.4.3	Stressed Vegetation	Stressed grass vegetation was observed throughout the Site in varying degrees. The Site superintendent indicated that it may be due to methane in soil from waste buried onsite. Various fairways at the Site were reported to have difficulty growing grass, including fairways 13, 11, 6, and half of 4.
9.4.4.4	Solid Waste	No solid waste operations were observed at the Site. However, the Site formerly operated as a Class II landfill with significant volumes of waste buried onsite. The maintenance area included several trash dumpsters.
9.4.4.5	Wastewater or Stormwater Discharge	Stormwater at the Site generally appears to drain outward, with the western portion draining toward the Dominguez Branch Channel, the eastern portion draining toward storm drains near Avalon Boulevard, and the northern portion toward MLK Jr. Street.
9.4.4.6	Wells	Numerous landfill gas wells and groundwater monitoring wells were observed at the Site and Site vicinity. No groundwater production wells were identified onsite.

FIGURES



Site Location Map

Site Assessment Report - Victoria Golf Course
340 M.L.K. Jr. Street
Carson, California

Geosyntec consultants

Los Angeles | April 2019

Figure 1

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Site Vicinity

Site Assessment Report - Victoria Golf Course
340 M.L.K. Jr. Street
Carson, California

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Figure 2

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Site Features

Site Assessment Report - Victoria Golf Course
340 M.L.K. Jr. Street
Carson, California

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Figure 3

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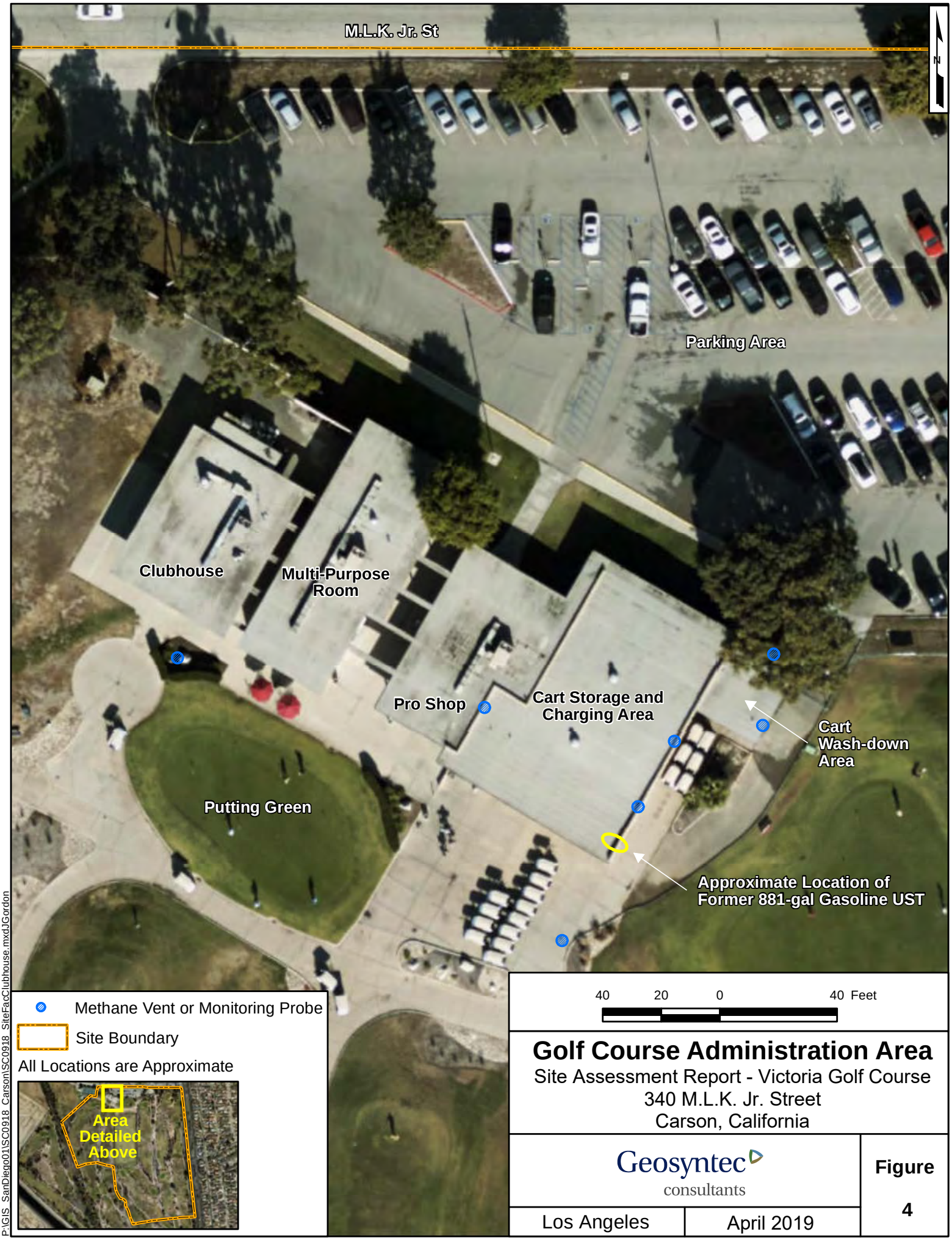

Golf Course Administration Area

Site Assessment Report - Victoria Golf Course
340 M.L.K. Jr. Street
Carson, California

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Figure 4

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Golf Course Maintenance Area

Site Assessment Report - Victoria Golf Course
340 M.L.K. Jr. Street
Carson, California

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Figure 5

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APPENDIX A

Professional Qualifications

Geosyntec consultants

DOUGLAS J. BAUMWIRT, PG, CHG
Principal Geologist

Phase I Environmental Site Assessments
Phase II Site Characterization
Regulatory Compliance Evaluations
Hazardous Materials Management

CAREER SUMMARY

Mr. Baumwirt joined Geosyntec Consultants in 2005 after working in the legal and geotechnical consulting fields. Representative experience includes the performance of Phase I Environmental Site Assessments (ESAs); extensive work plan preparation and implementation; coordination and mobilization of diverse field activities; sample collection; statistical analyses; preparation of groundwater monitoring, phase II environmental site assessment, site conceptual models, and many other reports; and project management for a wide variety of projects and budgets. Mr. Baumwirt's diverse background and multidisciplinary professional experience enables him to provide innovative and valuable services to a broad range of project types.

Environmental Assessment and Due Diligence Services

Mr. Baumwirt has performed more than 150 Phase I ESAs throughout the United States and Mexico in accordance with ASTM standards to evaluate the presence of Recognized Environmental Conditions (RECs) associated with the subject properties. The Phase I ESAs have involved a variety of property types and proposed usages, including:

- Landfills and burn dumps
- Petroleum distribution facilities/pipelines
- Large-scale linear projects (mixed uses)
- Pesticide manufacturing/distribution
- Concrete and asphalt production/distribution
- Large and small agricultural properties
- Commercial wholesale and retail facilities
- Biosolids processing and composting
- Electricity generating/transmission facilities
- Residential properties
- Industrial manufacturing facilities
- Aviation/aerospace manufacturing
- Rail and transit facilities
- Mines
- Schools
- Salvage yards
- Dry cleaners
- Service stations
- Large remote rural properties
- Former military installations

Based on the results of Phase I ESAs, additional due diligence services have included numerous Phase II site characterizations to assess potential impacts resulting from historical activities. Activities conducted include surface geophysical surveys; asbestos and lead-based surveys and abatement; soil, soil vapor, groundwater and surface water assessments; human health risk assessments; feasibility studies; developing estimated site cleanup costs and liability valuation; developing cleanup goals based on the current and/or future intended site usage; regulatory support and coordination; regulatory compliance; and litigation support.

Examples of the range of due diligence and regulatory compliance services provided by Mr. Baumwirt include:

Environmental Compliance Audits, San Diego Unified Port District, San Diego, California. Mr. Baumwirt conducted environmental compliance audits for three maintenance facilities used for automotive and marine vessel repair, vehicle and equipment fueling, bulk paint storage, and consolidation of hazardous materials and wastes. In an effort to prevent future environmental compliance violations issued by the San Diego County, Department of Environmental Health (DEH) and the California Department of Toxic Substances Control (DTSC), Mr. Baumwirt performed site inspections, reviewed documents provided by the client and documents available from online databases, and interviewed facility personnel. The findings of the audit were presented in a written report and discussed in person with the client, and included recommendations for facility and procedural improvements to reduce the likelihood of future violations.

Hazardous Materials Compliance Monitoring, East County Substation, San Diego Gas & Electric. To address Mitigation Measures imposed by the California Public Utilities Commission (CPUC) and to assist SDG&E, Mr. Baumwirt managed Geosyntec's hazardous materials compliance monitoring program for the 2-year construction period of the ECO Substation Project. The project included a large substation construction site, several satellite construction yards, and above-ground and below-ground linear alignments. Geosyntec's monitors conducted routine inspections at all project-related sites to document compliance with pertinent Mitigation Measures and various other rules and regulations. Inspections included hazardous materials and hazardous waste storage, handling, cleanup, and disposal. Additionally, Geosyntec provided hazardous materials training to Project personnel.

Due Diligence Portfolio, Confidential Waste Disposal Company, Kansas. To support a confidential client with the potential acquisition of more than 20 facilities including operating landfills, transfer stations, and materials recovery facilities, Geosyntec performed expedited Phase I Environmental Site Assessments (ESAs) and Limited Environmental Compliance Reviews (LECRs). To successfully complete the scope of work within the brief due diligence period, Geosyntec assembled a team comprised of practitioners from several Geosyntec offices, with a central command office to manage quality control and consistency of reporting. Mr. Baumwirt managed and performed large-scale Phase I ESAs and LECRs in accordance with ASTM Standard E 1527-13 for three facilities within three weeks. Facilities included: 1) a large, active landfill with a gas manufacturing plant, leachate injection wells, and several closed cells, including one listed on the National Priority List; 2) an active construction and demolition landfill; and 3) an inactive cement kiln dust landfill and active quarry facility. Based on preliminary findings from the Phase I ESAs, supplemental investigation was performed including groundwater and surface water monitoring. Geosyntec maintained the buyer's confidentiality during the evaluations, and successfully delivered quality reports in accordance with an aggressive schedule requested by the client.

Phase I Environmental Site Assessment and Phase II Site Characterization, Four Corners Generating Station, Southern California Edison. The Four Corners Generating Station (FCGS) is a coal-burning power plant located in northwestern New Mexico on land leased by the Navajo Nation. Since initiation of the plant in 1959, coal-combustion residuals have been disposed onsite and on adjoining properties. Geosyntec was contracted to perform a suite of due diligence services for the site to evaluate the potential environmental liabilities associated with the possible sale of the client's interest in the FCGS. Mr. Baumwirt managed and performed a large-scale Phase I ESA for the site in accordance with ASTM Standard E 1527-05. Due to the complex site history, large facility size, and client's planned end use of the study, the Phase I ESA report was prepared using a unique table and figure-based report format that tabulated and visualized the findings for the Site. Subsequently, Mr. Baumwirt managed and performed a comprehensive Site Characterization which included advancement of more than 70 soil borings and collection of groundwater, sediment, and surface water samples. The phase II report included a comprehensive summary of findings for the due diligence investigation and a site conceptual model based on site specific findings and historical records.

Phase I and Phase II Environmental Site Assessments, Confidential Home Improvement Retailer, Various Locations. Mr. Baumwirt has assisted in conducting and reviewing over fifty Phase I ESAs for various proposed and operating home improvement retail store locations throughout the United States. Historical property uses at these sites include agricultural, rural, commercial, and industrial uses. Each Phase I ESA report was prepared in accordance with current ASTM E 1527 Standard Practice for ESAs. Mr. Baumwirt has prepared and implemented workplan's for over ten Phase II ESAs for various proposed development locations throughout California from San Diego to Crescent City. Phase II ESA investigations included soil, soil vapor, and/or groundwater sampling for recognized environmental conditions identified in previous reports and in many instances performed coordination and oversight of asbestos and lead-based paint abatement contractors. At the client's request, special coordination was often implemented to preserve the confidential nature of the investigation and/or difficult access issues.

EDUCATION

San Diego State University, B.S., Geological Sciences, 2004

PROFESSIONAL HISTORY

Geosyntec Consultants, San Diego, California, 2005-Present
Geocon Consultants, Inc., San Diego, California, 2005
Eastwood-Stein Litigation Support, San Diego, CA 2001-2005

PROFESSIONAL CERTIFICATIONS AND TRAINING

California Professional Geologist No. 8745
California Certified Hydrogeologist No. 1044
Geosyntec Environmental Professional
Hazardous Waste Operations and Emergency Response (29 CFR 1910.120)

APPENDIX B

Pertinent Site Documents

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
Tel) 949-429-3564 • Fax) 949-429-3563
www.EnvironmentalSupportServices.com • Info@EnvironmentalSupportServices.com

June 23, 2018

Project Name: Carson

Geosyntec Consultants
2355 Northside Drive, Suite 250
San Diego, CA 92108

Attention: Steven Phillips

Dear Mr. Phillips

Attached is the Environmental (Hazardous/Toxic Waste) Records Search Summary of 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street ("Carson") site located in Carson, California. Environmental Support Services ("**ESS**") received the request on May 29, 2018 (See Appendix A). Should you have any questions regarding the summary, please call.

Sincerely,
Environmental Support Services

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

Records Search Summary

Company:	Geosyntec Consultants
Project Name:	Carson
Attention:	Steven Phillips
Street Address of Property:	"BKK Carson Dump" aka "Victoria Golf Course" 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street Carson, CA 90746 APN 7339-017-917

Los Angeles County – Public Health Investigator

As of July 1, 2017, all public information requests for Hazardous Materials Business Plans/Inventory, Hazardous Waste Generator License, California Accidental Release Prevention (Cal/ARP) Program information as well as, spills and site remediation information can be requested through the Los Angeles County Fire Department – Health Hazardous Materials Division (see below).

Los Angeles County Fire Department – Health Hazardous Materials Division

Online request: 5-30-18, Contact: Custodian of Records

ESS submitted a request for a records search concerning the Carson site to the Custodian of Records with the Los Angeles County Fire Department – Health Hazardous Materials Division. **ESS** requested information concerning the utilization, manufacture, storage and/or discharge of hazardous materials/waste, and any information concerning previous or on-going site investigations/remediations pertaining to hazardous materials/waste. Camille Negrini, with that department informed **ESS** on June 13, 2018 that her department had no records for 340 M.L.K. Jr. Street, Carson, CA (See Appendix B). Camille Negrini, with that department informed **ESS** on June 13, 2018 that her department did have records for 19200 South Main Street, Carson, CA (See Appendix B). Camille Negrini, with that department informed **ESS** on June 14, 2018 that her department did have records for 340 East 192nd Street, Carson, CA (See Appendix B).

Department of Toxic Substances Control (DTSC) – Cypress Office

E-mailed request: 5-30-18, Contact: Julie Johnson/Jone Barrio

Previous contacts with the DTSC have disclosed that this office only collects and stores information (such as treatment, storage and disposal of hazardous waste) concerning sites which have existing businesses, industries, etc. present. **ESS** requested that Ms. Johnson/Ms. Barrio, with the DTSC, check the file room records for any files/information concerning "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix C). Ms. Barrio informed **ESS** on June 1, 2018 that her department did have files/information concerning that site (See Appendix C). She informed **ESS** that 85% of the records for the site have been uploaded to EnviroStor. She also informed **ESS** that her department has seven feet of paper files. Per Mr. Phillips on June 1, 2018 **ESS** did not obtain copies of the paper files.

Department of Toxic Substances Control (DTSC) – Chatsworth Office

E-mailed request: 5-30-18, Contact: Glenn Castillo/Robert Hardison

Previous contacts with the DTSC have disclosed that this office only collects and stores information (such as treatment, storage and disposal of hazardous waste) concerning sites which have existing businesses, industries, etc. present. **ESS** requested that Mr. Castillo/Mr. Hardison, with the DTSC, check the file room records for any files/information concerning "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix D). Glenn Castillo, with that department informed **ESS** on May 31, 2018 that his department had no files/information concerning that site (See Appendix D). He referred **ESS** to the Cypress office for further information (See Appendix D).

City of Carson Fire Department – Fire Prevention

Previous communications with Personnel of the City of Carson Fire Department have disclosed that records concerning the storage of hazardous materials/waste, hazardous spills and underground storage tanks for sites in Carson would be kept with the lead agency, Los Angeles County Fire Department – Health Hazardous Materials Division (see above).

Los Angeles County Public Works – Waste Management Division

Visited: 6-6-18, 7:30 AM, Contact: Databases available at counter

ESS reviewed the Los Angeles County Public Works – Waste Management Division's database to determine if there were any records of underground storage tanks, industrial waste discharge permits or violations that may have been issued to the following: 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA. **ESS** reviewed the "Hazardous Materials System" and found the Carson site was listed (See Appendix E for photocopies obtained). No further information concerning the site was obtained from the Los Angeles County Public Works Department at the time of the investigation.

Cal Fire - Office of the State Fire Marshal

E-mailed request: 5-30-18, Contact: Pubic Records Request

ESS requested that the Public Records Section, with Cal Fire - Office of the State Fire Marshal, check their records concerning the storage of hazardous materials/waste, pipelines and underground storage tanks with regards to the following: "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix F). Anne Henigan, with that department informed **ESS** June 6, 2018 her department did have records within 1500 feet of the Carson site (See Appendix F).

Los Angeles County Sanitation Districts – Industrial Waste

E-mailed request: 5-30-18, Contact: Alexandria Pearce

ESS requested that Ms. Hamilton, with the Los Angeles County Sanitation Districts, check her records for any information concerning industrial waste discharge permits or violations for "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix G). She informed **ESS** on June 4, 2018 that her department had no records for "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix G).

City of Carson Building Department

Visited: 6-5-18, 11:30 AM, Contact: Sean

ESS requested that Sean, with the City of Carson Building Department, provide the building records (all building permits and certificates of occupancy) for 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA. He provided **ESS** with all the available building records for the addresses (See Appendix H). No further information concerning the site was obtained from the building department at the time of the investigation.

South Coast Air Quality Management District (SCAQMD)

E-mailed request: 5-30-18, Contact: Linda Koenig

ESS submitted a search request concerning active, inactive and sold files concerning "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA to Ms. Koenig of Public Records at the SCAQMD (See Appendix I). As of June 23, 2018, Ms. Koenig had not completed **ESS'** request. Should any information concerning the site surface, **ESS** will immediately forward it to Mr. Phillips at the Geosyntec Consultants office.

Regional Water Quality Control Board (RWQCB) – Los Angeles Region

E-mailed request: 5-30-18, Contact: File Review Section

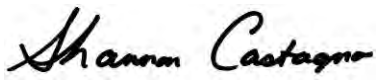
ESS requested that the File Review Section, with the RWQCB, provide the files for "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix J). Laura Gallardo, with that department informed **ESS** on June 14, 2018 that her department did have records for 340 East 192nd Street and 19200 South Main Street, Carson, CA (See Appendix J). No further information concerning the site was obtained from the RWQCB at the time of the investigation.

United States Environmental Protection Agency – Region IX

On-line request: 5-30-18, Contact: Ivry Johnson

ESS requested that Ms. Johnson, with the United States Environmental Protection Agency – Region IX, check her records for any files/information (such as treatment, storage and disposal of hazardous waste) concerning "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA. Jeff Scott, with that department informed **ESS** June 11, 2018 that his department had no records for "BKK Carson Dump" aka "Victoria Golf Course" at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA (See Appendix K).

Records Search completed by:



Shannon Castagno
Project Manager
Environmental Support Services

The information provided in this report was obtained by a comprehensive examination of public records, public information and public servant communications. The degree of care performed by **ESS** is equivalent to that exercised by environmental companies performing similar records searches.

Appendix A

Environmental (Hazardous/Toxic Waste) Records Search
Order Form

Shannon Castagno

From: Steven Phillips <SPhillips@Geosyntec.com>
Sent: Tuesday, May 29, 2018 4:56 PM
To: shannon@environmentalsupportservices.com
Cc: Doug Baumwirt
Subject: Records Review; Former BKK Carson Dump; Geosyntec
Attachments: SiteLayout.jpg

Hi Shannon,

I hope you had a nice holiday weekend! We are starting another PIESA, and we would like to initiate a file review for the former BKK Carson Dump (Victoria Golf Course) located at 340 East 192nd Street in Carson, California 90746. Other listed addresses for the property include 340 M.L.K. Jr. Street, and 19200 Main Street. The Site consists of approximately 82 acres of one parcel of land comprising 172 acres and identified by the Los Angeles County Assessors' Office as parcel number 7339017917. I attached a site image for reference.

Please contact the following agencies:

- USEPA
- California DTSC
- California Department of Public Health (CDPH)
- Los Angeles Regional Water Quality Control Board (RWQCB)
- South Coast Air Quality Management District (SCAQMD)
- Los Angeles County Department of Public Health – Public Health Investigator
- Los Angeles County Department of Public Works
- Los Angeles County Sanitation Districts
- Los Angeles County Fire Department
- Cal Fire – Office of Fire Marshall
- City of Carson Building Department
- City of Carson Fire Department
- Other pertinent agencies

Please let us know if you have any questions or concerns.

Thank you very much!

Steve R Phillips, GIT (CA)
Senior Staff Geologist

2355 Northside Drive
Suite 250
San Diego, California 92108
Phone: 619.810.4057

Geosyntec consultants
engineers | scientists | innovators

Mobile: 949.291.2859
Email: sphillips@geosyntec.com

www.Geosyntec.com

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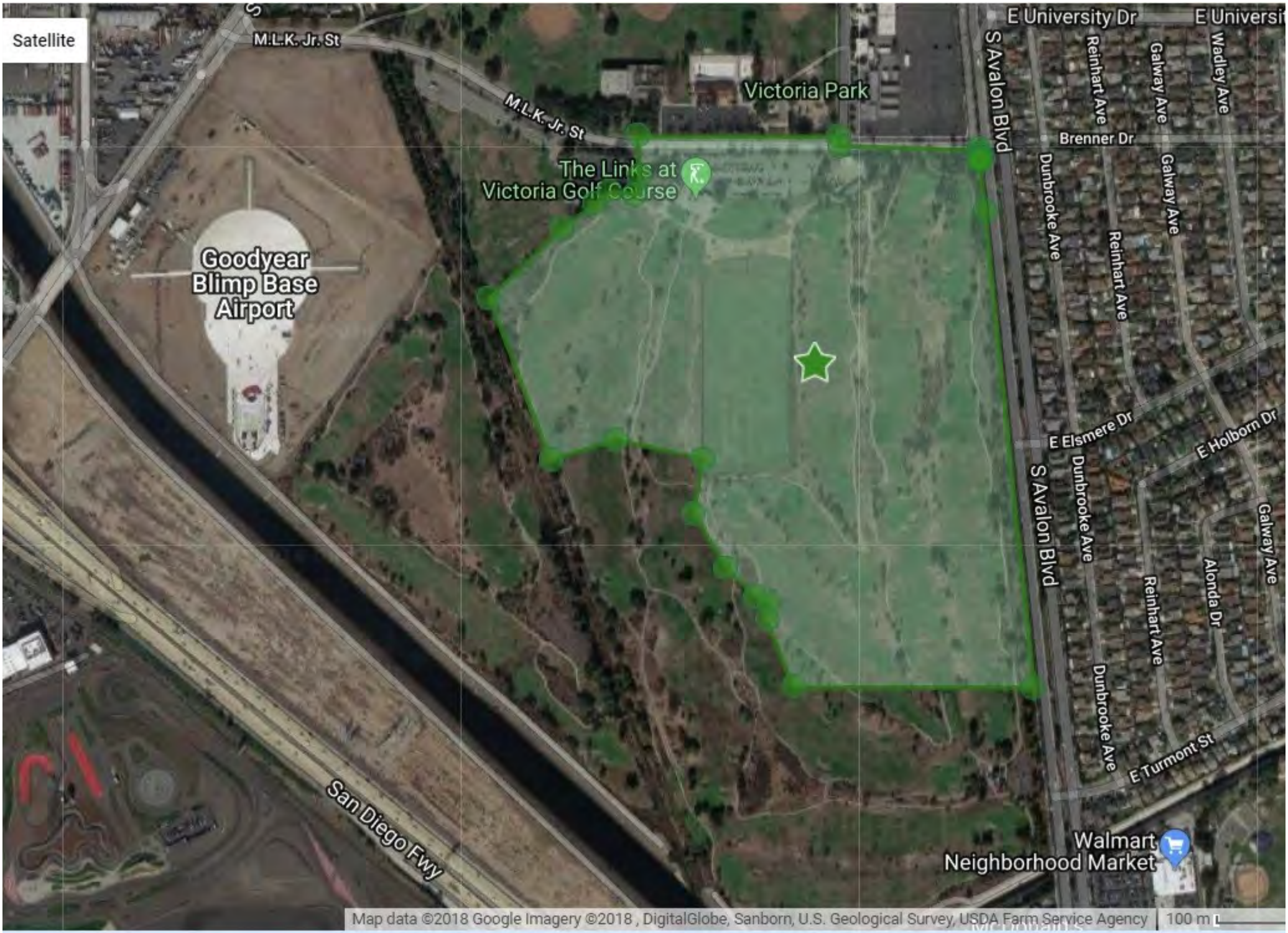
Satellite
M.L.K. Jr. St
M.L.K. Jr. St
Victoria Park
The Links at Victoria Golf Course
Goodyear Blimp Base Airport
E University Dr
S Avalon Blvd
Reinhart Ave
Galway Ave
Wadley Ave
Brenner Dr
Dunbrooke Ave
E Elsmere Dr
E Holborn Dr
Alonda Dr
E Turmont St
San Diego Fwy
Walmart Neighborhood Market
Map data ©2018 Google Imagery ©2018 , DigitalGlobe, Sanborn, U.S. Geological Survey, USDA Farm Service Agency
100 m

Appendix B

Response and Photocopies Obtained from the
Los Angeles County Fire Department – Health Hazardous Materials Division

Shannon Castagno

From: Negrini, Camille <Camille.Negrini@fire.lacounty.gov>
Sent: Wednesday, June 13, 2018 1:56 PM
To: shannon@environmentalsupportservices.com
Subject: 18-2291

The Los Angeles County Fire Department, Health Hazardous Materials Division, being the custodian or keeper of records, certify that a thorough search for the records you requested has been carried out.

Re: *(340 E Martin Luther King Jr St. Carson, CA 90746)*

This search revealed that no records were found for the above noted address.

It should be understood that this does not mean that the records you requested do not exist. It is possible that such records may be misfiled; exist under another spelling, another name, or may have been destoyed based on this Department's Record Retention Policy. However, with the information furnished to our office, and to the best of our knowledge, no records were located.

If you have any questions regarding your request, please contact our office at *(310) 534-6270.*

Los Angeles County Fire Department
Health Hazardous Materials Division
Inspection Section / Southwest District
HHMD Website

Shannon Castagno

From: Negrini, Camille <Camille.Negrini@fire.lacounty.gov>
Sent: Thursday, June 14, 2018 10:05 AM
To: shannon@environmentalsupportservices.com
Subject: 18-2290
Attachments: 340 E 192ND ST CARSON CA 90746.pdf; 340 E 192nd Street.pdf; 340 E 192nd Street000.pdf

The Los Angeles County Fire Department, Health Hazardous Materials Division, being the custodian or keeper of records, certify that a thorough search for the records you requested has been carried out.

Re: *(340 E 192ND STREET, CARSON CA 90746)*

The records found are attached to this email.

If you have any questions regarding your request, please contact our office at *(310) 534-6270.*

Camille Negrini
Los Angeles County Fire Department
Health Hazardous Materials Division
Inspection Section / Southwest District
HHMD Website

INSPECTION REPORT

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business: LINKS AT VICTORIA		**Inspection Date:** 01/22/2016
Address: 340 E 192ND ST	**City/State:** CARSON CA 90746	**Telephone:** (310) 532-7690
Owner: VICTORIA PUBLIC GOLF, LLC	**Email:** mperez@linksatvictoria.com	
FA #: FA0035930	**Multi-program Inspection #:** CENI-XHLW	**Inspection Type:** ROUTINE INSPECTION

☒ - NOTICE TO COMPLY/NOTICE OF VIOLATION.

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

Checklist: HW SQG
Checklist: HM
Checklist: AST Tier I

PROGRAM ELEMENT: HAZARDOUS MATERIALS HANDLER

RECORD ID: PR0057778

INSPECTED BY: PAOLO ZENAROSA

Established and adequately implemented a business plan

CLASS II

COMPLY BY: 2/21/2016

☒ **OUT** ☐ **COS** ☐ **RPT**

Violation Description:
Failure to establish and implement a business plan when storing hazardous materials at or above the reportable threshold quantities. HSC 6.95 25507

Violation Comment:
OBSERVATION: Owner/Operator failed to establish and implement a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.

Observed no hazardous materials business plan submitted online into CERS.

CORRECTIVE ACTION: Establish and implement a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.

OVERALL INSPECTION COMMENTS

Consent Given By:
Juan Lopez, Superintendent.

PROGRAM ELEMENT: HAZARDOUS WASTE GENERATOR

RECORD ID: PR0057779

INSPECTED BY: PAOLO ZENAROSA

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business:	FA #:	Date:
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

All containers of hazardous waste were closed except when addiing or removing waste

MINOR

COS: 1/22/2016

☒ OUT ☒ COS ☐ RPT

Violation Description:
Failure to meet the following container management requirements:

(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

(b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak. 22 CCR 12 66262.34(d)(2); 40 CFR 1 262.34(d)(2), 265.173

Violation Comment:
OBSERVATION: All hazardous waste containers shall be closed at all times except when adding or removing waste.

Observed an open 55 gallon container of used oil without overhead rain protection. Operator provided container cover onsite.

CORRECTIVE ACTION: Immediately close these containers and ensure all hazardous waste containers are closed when not adding or removing waste.

Generator maintains and operates the facility to minimize the possibility of fire/explosion/release

MINOR

COMPLY BY: 2/21/2016

☒ OUT ☐ COS ☐ RPT

Violation Description:
Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. 22 CCR 12 66262.34(d)(2); 40 CFR 1 262.34(d)(4), 265.31

Violation Comment:
OBSERVATION: Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or release of hazardous waste to air, soil, or surface water which could threaten human health or the environment.

Observed unmanaged buildup of oily water in the two orange bins used as secondary containment for hazardous waste containers.

CORRECTIVE ACTION: Immediately [fix leak, clean stains, etc.], and manage according to Title 22 hazardous waste regulations. Submit a statement and supporting documentation explaining how this waste was managed by 2/22/2016.

Business:	FA #:	Date:
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

Generator properly handles, manages, labels, and recycles used oil and fuel filters — **MINOR** — **COS: 1/22/2016**

☒ OUT ☒ COS ☐ RPT

Violation Description:
Failure to properly manage used oil and/or fuel filters in accordance with the requirements. 22 CCR 16 66266.130; HSC 6.5 25250.22

Violation Comment:
OBSERVATION: Generator failed to properly handle, manage, label, and/or recycle used oil and fuel filters.

Observed no labels on the used oil tanks and containers. Also observed no labels on the container of drained used oil filters. Operator provided labels on site.

CORRECTIVE ACTION: Owner/Operator shall immediatly comply with the Title 22 regulations with regards to the proper handling, management, labeling and recycling of used oil and fuel filters. Verify compliance with the CUPA within 30 days.

Owner/Operator has properly trained all employees on waste handling and emergency procedures — **MINOR** — **COMPLY BY: 2/21/2016**

☒ OUT ☐ COS ☐ RPT

Violation Description:
Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies. 22 CCR 12 66262.34(d)(2); 40 CFR 1 262.34(d)(5)(iii)

Violation Comment:
OBSERVATION: At the time of inspection, it could not be demonstrated (not necessarily documented) that employees who handle hazardous waste were properly trained. The generator must ensure that all employees who handle hazardous waste are thoroughly familiar with proper waste handling and emergency procedures.

Operator stated that used oil accumulated in 2015 has been disposed in household used oil collection centers like Autozone. Advised operator to dispose through a registered hazardous waste transporter and that "Autozone" used oil collection is allowed only for household generated used oil.

CORRECTIVE ACTION: Immediately provide training to all employees who handle hazardous waste and submit a copy of the training records to the CUPA by 2/22/2016.

The facility has an active EPA ID number (unless exempted HSC 25143.13) — **MINOR** — **COS: 1/22/2016**

☒ OUT ☒ COS ☐ RPT

Violation Description:
Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste. 22 CCR 12 66262.12

Violation Comment:
OBSERVATION: This facility does not have a valid EPA ID number to manage hazardous waste. A hazardous waste

Business:	FA #:	Date:
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an EPA ID number.

Observed EPA ID number inactive. Operator completed and signed the renewal form on site.

CORRECTIVE ACTION: Immediately obtain an EPA ID number through DTSC to manage hazardous waste and submit evidence to the CUPA by 2/22/2016.

Generator did not store hazardous waste onsite for greater than 180 days — **MINOR**

☒ OUT ☐ COS ☐ RPT — **COMPLY BY: 2/21/2016**

Violation Description:
Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met:
(1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms.
(2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f).
(3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days. 22 CCR 12 66262.34(d)

Violation Comment:
OBSERVATION: Facilities who generate less than 1000 kg of hazardous waste per month and do not exceed 6000 kg of waste stored on site at any time may store waste on site up to 180 days.

Observed 2x55 gallon tanks and a 50 gal tank containing used oil. Operator stated that the used oil was accumulated on or before June 2015. Advised operator to dispose of the used oil through a registered hazardous waste hauler within 30 days.

CORRECTIVE ACTION: Immediately contact a licensed hazardous waste hauler to dispose of this waste under manifest and submit a copy of the manifest to the CUPA by 2/22/2016.

OVERALL INSPECTION COMMENTS

Consent Given By:
Juan Lopen, Superintendent.

PROGRAM ELEMENT: AST LESS THAN 10,000 GALLONS

RECORD ID: PR0103325

INSPECTED BY: PAOLO ZENAROSA

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business:	**FA #:**	**Date:**
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

SPCC has been prepared and implemented

☒ **OUT** ☐ **COS** ☐ **RPT**

CLASS II

COMPLY BY: 2/21/2016

Violation Description:
Failure to prepare a Spill Prevention Control and Countermeasure (SPCC) Plan . HSC 6.67 25270.4.5(a); 40 CFR 1 112.3

Violation Comment:
OBSERVATION: Failure to prepare and implement SPCC.

Observed no SPCC plan on site for review at the time of inspection. Advised operator to complete a Tier I SPCC plan.

CORRECTIVE ACTION: Prepare and implement SPCC.

OVERALL INSPECTION COMMENTS

Consent Given By:
Juan Lopez, Superintendent.

Attention: Non-compliance could result in re-inspection fees, permit revocation, and/or administrative/civil/criminal penalties. A re-inspection may occur at any time to verify compliance. Any time granted for correction of the violation(s) does not preclude any enforcement action by this Department or other agencies.

It is improper and illegal for any County officer, employee or inspector to solicit bribes, gifts, or gratuities in connection with performing their official duties. Improper solicitations include requests for anything of value such as cash, discounts, free services, paid travel or entertainment, or tangible items such as food or beverages. Any attempt by a County employee to solicit bribes, gifts or gratuities for any reason should be reported immediately to either the County manager responsible for supervising the employee or the Fraud hotline at (800) 544-6861 or www.lacountyfraud.org. YOU MAY REMAIN ANONYMOUS.

Signatures

Juan Lopez
Superintendent

Paolo Zenarosa
Hazardous Materials Specialist II

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business:	FA #:	Date:
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

PREVIOUS INSPECTIONS

Activity Date	PE	Rercord ID	Serial No.	Group Code	Service	Result	Action	Activity Min	Travel Min	Inspector ID
01/22/2016	3003	PR0057778	DANKUXR2P	CENI-XHLW	001	02	01	50	15	EE0000171
01/22/2016	1002	PR0057779	DAOB6RFC4	CENI-XHLW	001	02	01	50	15	EE0000171
01/22/2016	3701	PR0103325	DADECB1QS	CENI-XHLW	001	02	01	50	15	EE0000171
01/28/2016	3701	PR0103325	DA0825342		051	00	00	30	0	EE0000171
01/28/2016	3003	PR0057778	DA0825343		051	00	00	30	0	EE0000171
01/28/2016	1002	PR0057779	DA0825345		051	00	00	30	0	EE0000171
09/07/2017	3003	PR0057778	DAQMUIINE		002	22	03	30	15	EE0000171
09/07/2017	3701	PR0103325	DAJUK7TXY		002	22	03	30	15	EE0000171
09/07/2017	1002	PR0057779	DALJVEDHP		002	01	02	30	15	EE0000171
12/11/2017	1002	PR0057779	DASQL3NYA		053	21	03	15	0	EE0000187
12/11/2017	3701	PR0103325	DAYUEDVLF		053	22	03	15	0	EE0000187
01/11/2018	3003	PR0057778	DA8VTM1LL		053	21	03	30	0	EE0000187

VIOLATIONS LIST

Open	Activity Date	Program Element	Viol Status	Service	Result	Action	Violation Degree	Comply on Date	Description
Y	01/22/2016	3003	OU	001	02	01	Class 2		Established and adequately implemented a business plan
	01/22/2016	1002	OU	001	02	01	Minor	01/22/2016	All containers of hazardous waste were closed except when addiing or removing waste
	01/22/2016	1002	OU	001	02	01	Minor	09/07/2017	Generator maintains and operates the facility to minimize the possibility of fire/explosion/release
	01/22/2016	1002	OU	001	02	01	Minor	01/22/2016	Generator properly handles, manages, labels, and recycles used oil and fuel filters
	01/22/2016	1002	OU	001	02	01	Minor	09/07/2017	Owner/Operator has properly trained all employees on waste handling and emergency procedures
	01/22/2016	1002	OU	001	02	01	Minor	01/22/2016	The facility has an active EPA ID number (unless exempted HSC 25143.13)
	01/22/2016	1002	OU	001	02	01	Minor	09/07/2017	Generator did not store hazardous waste onsite for greater than 180 days
Y	01/22/2016	3701	OU	001	02	01	Class 2		SPCC has been prepared and implemented

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business:	**FA #:**	**Date:**
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

LOG SHEET

3-2-2016: Comandante
Reviewed file; follow up required

9/7/17 pzenarosa
Followup on site. Previous manager no longer with company. New supervisor is Martin Perez. Observed no SPCC and no HMBP on site or online. AST and HM NOV not abated.

INSPECTOR FIELD NOTES

PZ. Paolo Zenarosa
Date: 1/22/2016

I. OPENING CONFERENCE

Nature of business: LINKS AT VICTORIA. The facility is a maintenance shop and maintenance equipment storage area for the Victoria Public Golf courses.

Consent to conduct the inspection was granted by: Juan Lopez, Superintendent.

Additional individuals involved in the inspection (if applicable):

Program Element(s): The facility was verified to be a:
Hazardous Waste Generator with 10 employees corresponding to PE 1002;
Hazardous Materials Handler with volume thresholds corresponding to PE 3003;
Aboveground Storage Tank Handler with a petroleum volume threshold corresponding to PE 3701.

II. WALKTHROUGH

Process(es):

HazMat Observed On Site:
- HM/volume/hazard/location
- No CERS submittals for 2015
- Used oil / 3x55 gal tanks / toxic / next to diesel AST
- Gasoline / 1,000 gal AST / flammable / refuel island
- Diesel / 1,000 gal AST / toxic / refuel island
- Motor oil / 55 gal / toxic / shop
- Hydraulic oil / 55 gal / toxic / shop
- Used oil / 55 gal / toxic / shop
- Calcium sulfate solid / 8x50lb sacks / toxic / exterior storage area
- Calcium chloride / 275 gal tote / toxic / exterior area
- Ammonium sulfate / 48x50 lb sacks / toxic / storage shed
- Urea / 40x50 lb sacks / toxic / storage shed

HazWaste Observed On Site:

- Oil change of equipment > generates used oil > stored in various containers > operator stated that he disposed used oil in O'reily's or Autozone household used oil collection centers – NOV.
- Batteries > managed by Battery Works Co.
- Rags > managed by Cintas.
- Oil change > generates drained used oil filters > stored in 55 gal containers
- 3x55 gal used oil tanks near the AST fuel island has been full and has been at the facility since 6/15, according to the operator – NOV. Stored more than 180 days on site without proper disposal.

Aboveground Petroleum Storage Tank
- 1000 gal diesel
- 1000 gal gasoline
- 55 gal motor oil
- 55 gal hydraulic oil
- 220 gal used oil
- TOTAL – 2,330 gal

III. DOCUMENTS

HazMat - CERS Review:
- Annual Recertification –nok, NOV.
- Facility Information – nok, NOV.
- Emergency Contact Information verified and accurate - nok, NOV.
- Reported inventory matches observed quantities - nok, NOV.
- Site Map with all required content - nok, NOV.
- Emergency Response and Contingency Plan - nok, NOV.
- Employee Training Plans - nok, NOV.

HazWaste
- Active EPA ID - nok, NOV, COS.
- CUPA Permit - ok
- Hazardous Waste Manifests - nok, NOV.
- HW Container Weekly Inspection Log (if any) - nok, NOV.

APSA
- Spill Prevention and Countermeasure Control (SPCC) Plan (date and company) – nok, NOV.

IV. CLOSING CONFERENCE
- The inspection report and inspection findings were explained to the operator/owner.
- The owner/operator was advised of proper hazardous waste management, hazardous materials handling, record-keeping, permit payment, and good business practices.
- The owner/operator was advised to update, review and submit any and all information missing in the California Environmental Reporting System (CERS) online system.
- The owner/operator was advised to report to the CUPA any and all incidents of hazardous waste, hazardous materials and petroleum products that had spilled into off-site areas from the facility.
- The owner/operator was advised to contact the CUPA for any and all future questions regarding hazardous materials and if any change were to be made to their manufacturing processes, ownership changes and/or changes to SPCC Plans.

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
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Business:	**FA #:**	**Date:**
LINKS AT VICTORIA	FA0035930	01/22/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

V. VIOLATIONS

NOV issued for no HMBP in CERS, uncovered used oil container, unmanaged oil spill in the orange bin secondary containment, no labels on the HW used oil containers and tanks, accumulation and storage of HW used oil beyond 180 days, no EPA ID number (COS), and no SPCC plan.

Field Notes

LIST ORDER OF INSPECTION AS FOLLOWS: I. OPENING CONFERENCE II. WALK THROUGH III. DOCUMENTS IV. CLOSING CONFERENCE V. VIOLATIONS

I. OPENING CONFERENCE

ARNIE PEREDIA - GOLF COURSE SUPERINTEDENT

- GAVE CONSENT FOR THE INSPECTION

- ACCOMPANIED RUBEN GARCIA DURING THE WALK THROUGH

- EQUIPMENT / FERTILIZERS

* OIL CHANGES, FILTERS, FERTILIZERS, GAS AND DIESEL ABOVEGROUND TANKS

10 EMPLOYEES

II. WALK THROUGH

- PARTS WASHER

- AQUEOS SOLUTION

- RARELY USED

- 55 GALLON HYDRAULIC OIL

- 55 GALLON USED OIL CONTAINER 6/11/12

- 3 X 70 GALLON USED OIL METAL CONTAINERS

* LABELED 6/11/12

* THE SECONDARY CONTAINMENT BERM OF THE ABOVEGROUND FUEL STORAGE TANKS

CONSENT GIVEN BY: ARNIE PEREDIA INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 145

1st DATE & TIME OF INSPECTION: 10-17-12 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

Field Notes

LIST ORDER OF INSPECTION AS FOLLOWS: I. OPENING CONFERENCE II. WALK THROUGH III. DOCUMENTS IV. CLOSING CONFERENCE V. VIOLATIONS

DIESEL/FUEL ABOVEGROUND STORAGE TANKS

- 500 GALLON DIESEL TANK
- 1000 GALLON GAS TANK

- USED FOR STORING SMALL CHEMICAL CONTAINERS

- LIQUID FERTILIZERS SMALL CONTAINERS

- FERTILIZERS MIXED WITH WATER STORED IN 2 TOTE PLASTIC TANKS
- 500 GALLON FERTILIZER
- 1000 GALLON PENETRANT

III. DOCUMENTS

OBSERVED THE FOLLOWING

(1) CONTINGENCY PLAN ON FILE

(2) SPCC PLAN ON FILE

IV. CLOSING CONFERENCE

ADVISED OPERATOR

(1) HANDLING, STORAGE AND DISPOSAL OF HAZWASTE

CONSENT GIVEN BY: ARNIE PEREDIA INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 145

1st DATE & TIME OF INSPECTION: 10-17-12 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

(2)

Field Notes

LIST ORDER OF INSPECTION AS FOLLOWS: I. OPENING CONFERENCE II. WALK THROUGH III. DOCUMENTS IV. CLOSING CONFERENCE V. VIOLATIONS

(2) CHEMICAL REPORTABLE QUANTITY

II. VIOLATIONS

ISSUED NOV 30 DAYS COMPLIANCE

CONSENT GIVEN BY: ARNIE PEREDIA INSPECTOR SIGNATURE: Rhorcia EMPLOYEE ID: 175

1st DATE & TIME OF INSPECTION: 10-17-12 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

COUNTY OF LOS ANGELES FIRE DEPARTMENT
HEALTH HAZARDOUS MATERIALS DIVISION

LOG SHEET

BUSINESS NAME: LINKS AT VICTORIA | FA 0035930

ADDRESS: 340 E. 192ND ST. CARSON CA 90746

DATE	HMS INIT.	FINDINGS/ REMARKS
6/10/09	(R)	COULD NOT FIND PREVIOUS FILE.
		CREATED NEW FILE.
		CONDUCTED COMPLAINT INVESTIGATION FOR A
		CHANGE OF OWNERSHIP. ROUTINE INSPECTION
		ISSUED NOV FOR UP PACKET. CONFIRMED
		OWNERSHIP CHANGED. SUBMITTED PAPERWORK TO
		ROSS TO MAKE CHANGES TO ENVISION.
		30 DAYS FOR UP SUBMITTAL. (R)
8/19/09	(R)	CONDUCTED SITE VISIT PAPERWORK NOT COMPLETE
		OPERATOR REQUESTED EXTENSION GIVEN TILL
		9/01/09.
9/1/09	(R)	CONDUCTED OFFICE CONSULTATION FOR UP PACKET.
		OPERATOR SUBMITTED COMPLETED UP PACKET AND
		WILL SUBMIT SPCC PLAN IN A FEW DAYS, 9/4/09. (R)
		SENT COPY OF MAP AND CHEMICAL INVENTORY TO
		FIA, DATA OPS TO PROCESS. (R)
9/15/09	(R)	RECEIVED SPCC PLAN. FILED, ALL VIOLATIONS
		CORRECTED FOR NOV ISSUED ON 6/10/09. FILE
10/17/2012	(R)	CONDUCTED ROUTINE INSPECTION. ISSUED NOV
		30 DAYS COMPLIANCE. (R)
11/21/12	(R)	CONDUCTED FOLLOW UP INSPECTION FOR NOV ISSUED ON
		10/17/2012. ALL VIOLATIONS CORRECTED. FILE (R) 1-9-13

FILE

LA County Fire Department
Facility Information Report

OWNER FILE INFORMATION

☐ Ownership change: _____ Effective Date ☐ Update ☐ Out of Business _____ Effective Date

Owner ID: OW0052272
Owner Name: VICTORIA PUBLIC GOLF, LLC Tax ID : 20-4215460
Owner DBA: LINKS AT VICTORIA Drvr Licns :
Owner Address: 3550 WILSHIRE BLVD #1930
LOS ANGELES, CA 90010
Work/Business Phone: 213-368-1444
Billing/Mailing Address: 8640 RUSH ST.
ROSEMEAD, CA 91770
ATTN/Care of: ARNIE PEREDIA
Ownership Type:

FILE

FACILITY FILE INFORMATION

Facility ID: FA0035930 Account ID: AR0041536
Facility Name: LINKS AT VICTORIA
No. of Employee: 10
Site Location: 340 E 192ND ST
CARSON, CA 90746 EPA ID CAL000310770
Phone: 310-323-4174 CERS #
Mailing Address: 340 E 192ND ST
CARSON, CA 90746
Operator/Care of: ARNIE PEREDIA E-Mail : Not Specified
District: SW - SOUTHWEST
City Code: CARS CARSON
CUPA Jurisdiction: CO
Operating Hours: Days: Hours:
SIC Code: 7992 - Public golf courses
Business Type / Code: 3 CORPORATION 01 CORPORATION
Station: 116

0066933

GENERAL HEALTH PROGRAM ELEMENTS

Record ID	Current Program Element	Current Status	# of Unit	Effective Date Beg.	Effective Date End	Changes Program Element	Changes Status
PR0057778	3003 - HM HANDLER, FEE GROUP 03	Active, billable		09/01/06			
PR0057779	1002 - HW GEN, 6-19 EMPLOYEES	Active, billable		09/01/06			
PR0085497	8040 - CALIFORNIA ELECTRONIC REPORTING SURCHARGE	Inactive, non-billable					
PR0103325	3701 - AST - LESS THAN 10,000 GALLONS	Active, billable		10/17/12			

Add Program Element:

Program Element _____ Status _____ Effective Date _____ Program Element _____ Status _____ Effective Date _____

CA Waste Code					
RCRA Waste Code					
AMOUNT per quarter					
UNITS (PGTY) Pounds, Gallons, Tons, Yards					

CONSENT GIVEN BY: _____ INSPECTOR SIGNATURE: _____ EMPLOYEE ID: _____

1st DATE & TIME OF INSPECTION: _____ 2nd DATE & TIME OF INSPECTION: _____

3rd DATE & TIME OF INSPECTION:

ENVIRONMENTAL CONTACT INFORMATION

** *For Haz Mat Handlers.*

Contact :Name: BRIAN WHANG
3550 WILSHIRE BLVD #1930
LOS ANGELES

Phone : 213-368-1444

Dun & Bradst.: * Please Fill-Out

Year: CCP 2012 Inventory 2012

EMERGENCY CONTACT INFORMATION

	PRIMARY CONTACT:	SECONDARY CONTACT:
Name :	ARNIE PEREDIA	MEL MATSUKANE
Title :	SUPERINTENDENT	GENERAL MGR
Business Phone :	310-532-7690	310-323-4174
24 - Hour Phone :	714-726-5233	Not Specified
Pager # :	Not Specified	Not Specified

PREVIOUS INSPECTIONS

Activity Date	Program Element		Service	Result	Action	Activity Min	Travel Min	Inspector ID	Violation Code
03/07/2006	1001	PR0057779	053	01	00	15	0	EE0000058	
03/07/2006	3001	PR0057778	053	01	00	15	0	EE0000058	
06/10/2009	1002	PR0057779	001	02	01	30	0	EE0000145	
06/10/2009	3001	PR0057778	001	02	01	30	0	EE0000145	
09/01/2009	3001	PR0057778	061	00	00	30	0	EE0000145	
09/01/2009	1002	PR0057779	061	00	00	30	0	EE0000145	
09/15/2009	3001	PR0057778	053	01	02	30	0	EE0000145	
10/17/2012	3001	PR0057778	001	02	01	30	30	EE0000145	
10/17/2012	1002	PR0057779	001	02	01	45	0	EE0000145	

VIOLATIONS LIST

Open	Activity Date	Program Element	Viol Status	Service	Result	Action	Violation Code	Violation Degree	Description
	06/10/2009	1002	10	001	02	01	0003	M	HWG MINOR VIOLATION
	06/10/2009	3001	10	001	02	01	0003	M	HM MINOR VIOLATION
	10/17/2012	3001	10	001	02	01	0003	M	HM MINOR VIOLATION
	10/17/2012	1002	10	001	02	01	0003	M	HWG MINOR VIOLATION

CONSENT GIVEN BY: ARNIE PEREDIA INSPECTOR SIGNATURE: RMarcia EMPLOYEE ID: 142

1st DATE & TIME OF INSPECTION: 10-17-12 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

COUNTY OF LOS ANGELES FIRE DEPARTMENT
HEALTH HAZARDOUS MATERIALS DIVISION

INSPECTION REPORT

CERTIFIED UNIFIED PROGRAM AGENCY • PARTICIPATING AGENCY

24330 NARBONNE AVENUE, LOMITA, CA 90717
PHONE: (310) 534-6270 FAX: (310) 539-6948

BUSINESS:	OWNER:	DATE:
LINKS AT VICTORIA	VICTORIA PUBLIC GOLF	10-17-2012
ADDRESS:		**FACILITY ID:**
340 E 192ND ST. CARSON CA 90746		0035930

The following requirements, if applicable, have been inspected. This document constitutes a summary of violations and notice to comply if the violation column (V) is checked. *References: Titles 19 and 22 of the California Code of Regulations (CCR); Chapters 6.5, 6.67, and 6.95 of the California Health and Safety Code (HSC); Titles 11 and 12 of the Los Angeles County Code (Co Ord); and Title 40 Code of Federal Regulations (CFR).* ***NOTE:*** *For all CFR sections refer to CCR 66262.34(d)(2) for applicability.*

INSPECTION TYPE: [X] INITIAL [ ] RE-INSPECTION [ ] OTHER:

	V	HAZARDOUS WASTE (HW) GENERATOR	SECTION
1		HW accumulation time	22CCR12 66262.34(a-d)
2		Satellite accumulation	22CCR12 66262.34(e)
3		HW labeling	22CCR12 66262.34(f)
4		Hazardous materials storage and labeling	22CCR11 66261.2(f)
5		Containers leaking or not in good condition	22CCR15 66265.171 | 40CFR1 265.171
6		Compatibility of waste with containers	22CCR15 66265.172 | 40CFR1 265.172
7		HW containers closed	22CCR15 66265.173(a) | 40CFR1 265.173(a)
8		Container inspection – weekly	22CCR15 66265.174 | 40CFR1 265.174
9		Separation of incompatibles	22CCR15 66265.177 | 40CFR1 265.177
10		Tank overflow and spill prevention	22CCR15 66265.194 | 40CFR1 265.201(b)
11		Tank inspection	22CCR15 66265.195 | 40CFR1 265.201(d)
12		Tank system management	22CCR15 66265.190-.202 | 40CFR1 265.201
13		Empty containers	22CCR11 66261.7
14		Used oil management	HSC 6.5 25250.4
15		Used oil / fuel filter management	22CCR16 66266.130 / HSC 6.5 25250.22
16		Used battery management	22CCR16 66266.81
17		Contaminated textile management	HSC 6.5 25144.6
18		EPA ID number [submit DTSC form 1358]	22CCR12 66262.12
19		HW manifest complete	22CCR12 66262.23(a)
20		Manifest copies to DTSC	22CCR12 66262.23(a)(4)
21	X	Manifest copies retained for 3 years	22CCR12 66262.40(a)
22		Consolidated manifest requirements	HSC 6.5 25160.2
23		Manifest exception reporting	22CCR12 66262.42
24		HW transported with manifest	22CCR12 66262.20
25		HW transported by registered hauler	HSC 6.5 25163(a)
26		Land disposal restriction requirements	22CCR18 66268.7(a)

	V	HAZARDOUS WASTE GENERATOR	SECTION
27		HW analysis retained for 3 years	22CCR12 66262.40(c)
28		HW determination	22CCR12 66262.11
29		Proper disposal of HW	HSC 6.5 25189.5(a)
30		Reckless management of HW	HSC 6.5 25189.6
31		Quarantine order	HSC 6.5 25187.6
32		Maintain/operate to prevent release/fire	22CCR15 66265.31 | 40CFR1 265.31
33		Required equipment and maintenance	22CCR15 66265.32-.33 | 40CFR 265.32-.33
34		Required aisle space	22CCR15 66265.35 | 40CFR1 265.35
35		Personnel training	22CCR15 66265.16 | 40CFR1 262.34(d)(5)(ii)
36		Emergency information posting [SQGs]	40CFR1 262.34(d)(5)(ii)
37		Contingency plan [LQGs]	22CCR15 66265.51
38		Source reduction requirements [LQGs]	22CCR31 67100.3
39		Biennial report requirements [RCRA LQGs]	22CCR12 66262.40-.41
40		Closure requirements [LQGs]	22CCR15 66265.111 / .114
41		Site assessment requirements	HSC 6.5 25187(a)(1)
42		Excluded recyclable material management	HSC 6.5 25143.2 / .9
43		Recyclable material report	HSC 6.5 25143.10
44		Universal waste management | Aerosol cans	22CCR23 66273.1-.8 | HSC 6.5 25201.16
45		Other violation(s)	

	V	HAZARDOUS MATERIALS HANDLER	SECTION
50		HMBP established and implemented	HSC 6.95 25503.5
51	X	HMBP submitted: updated/accurate	HSC 6.95 25505
52		CalARP General Requirements	19CCR4.5 2735.5(a)

	V	ABOVEGROUND PETROLEUM STORAGE	SECTION
60		SPCC plan	HSC 6.67 25270.4.5(a)
70		**PERMIT REQUIRED** – Submit UP Forms	Co Ord 12.50.075

[ ] **NO SIGNIFICANT VIOLATIONS OBSERVED ON DATE OF INSPECTION.**

[X] **NOTICE TO COMPLY: THE VIOLATION(S) CITED MUST BE CORRECTED BY** 11-19/2012.

[ ] **RETURN CERTIFICATION OF COMPLIANCE FOUND ON BACK OF THIS NOTICE.**

Attention: The requirements checked are in violation. Non-compliance could result in re-inspection fees, permit revocation, and/or administrative/civil/criminal penalties. A re-inspection may occur at any time to verify compliance. Any time granted for correction of the violation(s) does not preclude any enforcement action by this Department or other agencies.

It is improper and illegal for any County officer, employee or inspector to solicit bribes, gifts or gratuities in connection with performing their official duties. Improper solicitations include requests for anything of value such as cash, discounts, free services, paid travel or entertainment, or tangible items such as food or beverages. Any attempt by a County employee to solicit bribes, gifts or gratuities for any reason should be reported immediately to either the County manager responsible for supervising the employee or the Fraud hotline at (800) 544-6861 or www.lacountyfraud.org. YOU MAY REMAIN ANONYMOUS.

#21 MANIFEST COPIES RETAINED FOR 3 YEARS

PROVIDE COPIES OF WASTE MANIFEST FOR PREVIOUS WASTE DISPOSAL.

OBSERVED WASTE MANIFEST NOT AVAILABLE FOR REVIEW.

#51 HMBP SUBMITTED: UPDATED/ACCURATE

Inspected By:	Consent Given By:	Authorized Representative's Signature:
RUBEN GARCIA	ARNIE PEREDIA	

COUNTY OF LOS ANGELES FIRE DEPARTMENT
HEALTH HAZARDOUS MATERIALS DIVISION

INSPECTION REPORT

CONTINUATION PAGE

BUSINESS	FACILITY ID:	DATE.
LINKS AT VICTORIA	0035930	10-17-2012

PROVIDE HAZMAT INUENTORY SHEET FOR THE LIQUID FERTILIZER AND PENETRANT STORED AT THE 500 GALLON AND 1000 GALLON ABOVEGROUND STORAGE TANK.

ADVISED TO PROVIDE HAZARD PLACARD ON THE ABOVEGROUND TANK.

Inspected By	Authorized Representative's Signature:
RUBEN GARCIA	

WHITE – HHMD Follow-up/File CANARY – Facility copy

Los Angeles County Fire Dept • Health Hazardous Materials Division
Certified Unified Program Agency • Participating Agency

FOLLOW-UP INSPECTION ACTIVITIES

DBA:	Address:	
LINKS AT VICTORIA	340 E 192ND ST. CARSON CA 90746	
FA:	**Inspected by:**	**Date:**
0035930	RGARCIA	11-21-12

☒ Violations Abated ☐ Partial Compliance ☐ Non-compliance ☐ Extension ☐ Follow-up Billable

Consent granted by:

Document the status of each violation, as well as any supporting documents/observations:

#21 OBSERVED COPIES OF MANIFEST FROM LAST PICK UP

#51 HAZMAT INVENTORY UPDATED.

X

ARNIE PEREDIA

Inventory / CCP Tracking Report

Printed By: REMAETINEZ
Printed Date: 7/20/2011

Facility: FA0035930 **LINKS AT VICTORIA** Phone: 310-323-4174
340 E 192ND ST CARSON **90746**

Owner: OW0052272 **CareOf:** ARTURO FUERTES Work Phone: Not Specified
VICTORIA PUBLIC GOLF, LLC **DBA:** LINKS AT VICTORIA Home Phone: 213-368-1444
8640 RUSH ST.
ROSEMEAD CA 91770

Cert Mail: **Dunn / Brad:**

SIC: 7992 - Public golf courses

Program Element: 3001 HM HANDLER, FEE GROUP 01
01

Previous Record: *TBA*

District: SOUTHWEST **Station:** 116

Inventory

*** Current Status**

H

Inventory Tracking Milestones

		Date Completed	To Do Next
Report Year	2011	7/20/2011	
Package Sent Date	11/16/2010		
Package Received Date	2/1/2011		
Correction Notice Sent Date			
Correction Received Date			
Note	DENNIS WESSELDINE, DOCUMENT PREPARER, 01/24/201		

Forward to District Office

CCP

*** Current Status**

H

CCP Tracking Milestones

Report Year	2011
Package Received Date	7/20/2009
Correction Notice Sent Date	
Correction Received Date	

Cal-ARP section -- RS: No

A. Package Sent B. Package Received D. Correction Notice Sent E. Correction Received
F. Identified with Chemical Change H. Accepted w/o Change I. Chemical Information Updated R. Undeliverble Mail

Last Touched Date: 7/20/11 By: FMUA
Report #5307_RS V. 110106

LOS ANGELES COUNTY FIRE DEPARTMENT
HEALTH HAZARDOUS MATERIALS DIVISION
5825 Rickenbacker Road, Commerce, CA 90040

S 1/21

BUSINESS PLAN ANNUAL RENEWAL CERTIFICATION

Hazardous Materials Inventory Statement (HMIS)

I certify that the attached HMIS reflects the handling of hazardous materials for the reporting year in accordance with the following conditions: (Please check all that apply).

- ☐ **Delete:** Write "delete" on the HMIS next to any previously disclosed hazardous materials that are no longer used.
- ☐ **Revise:** Write the correct amounts, locations, or container type on the HMIS to reflect the accuracy of any previously reported hazardous materials.
- ☐ **EPCRA Compliance:** Fill in the EPCRA field with your signature on the HMIS for any hazardous material type and quantity identified on 40 CFR Part 355, Appendix A—The List of Extremely Hazardous Substances and Their Threshold Planning Quantities.
- ☐ **Add:** Complete one **Hazardous Materials Inventory—Chemical Description Form** to add each hazardous materials that you have not previously disclosed. Submit one form per chemical.
- ☒ **No Change: Hazardous Materials Inventory Statement** (HMIS) is accurate and complete.

Consolidated Contingency Plan (CCP)

An initial submittal of the CCP is required when you start handling hazardous materials. At least once every 3 years after the initial submittal, the CCP needs to be reviewed and certified that the file with your agency is accurate and current in accordance with the following conditions:

- ☐ **If the Owner/Operator page indicates "CCP Certification required"** complete and submit a new CCP.
- ☐ **Modification:** Significant changes in facility personnel or operations required a revision of the CCP. Complete and submit changes of your CCP with this form. Indicate changes by crossing out old information, and writing in the correct information.
- ☐ **Lost:** Complete and submit any parts of your CCP that were lost or damaged.
- ☒ **No Change:** There have not been any significant changes in the facility's personnel and operations that require a revision to the current CCP.

Received
FEB 01 2011
HHMD-DataOps

Cal-ARP Program

I reviewed the threshold quantities in Section 2770.5 of Title 19 of the California Code of Regulations and certify that any regulated substance on the attached HMIS accords with the following registration requirement:

- ☐ **Add:** Complete the **Cal-ARP Program Regulated Substance Registration** form only if the regulated substance is at or above the threshold quantity (TQ). Submit one form per chemical.
- ☒ **No Change:** The previously submitted registration for regulated substance(s) is accurate.

ANNUAL CERTIFICATION

I certify that the information submitted herein is complete and accurate. Also, no hazardous materials subject to the inventory requirements of Chapter 6.95 of the Health and Safety Code are being handled that are not listed on the most recently submitted annual inventory form.

DENNIS WESSELDINE	MEL MATSUKANE	Mel Matsukane
Print Name of Document Preparer	Print Name of Owner/Operator	Signature of Owner/Operator
LINKS AT VICTORIA	340 E. CARSON ~~EL~~ CA	1-24-11
Business Name	Site Address 192ND ST	Date

FA0035940
LINKS AT VICTORIA
340 E 192ND ST
116

Submit this packet to the above address before January 3, 2011 to avoid a late submittal penalty of $331 or other enforcement options. Certified Mail advised. Do not submit any fees with this packet.
Obtain unified program forms from our website at http://www.fire.lacounty.gov/HealthHazMat/HHMDForms.asp or from our Data Operations Unit at (323) 890-4000.

Date run : 11/2/2010 10:29:17AM

FA0035930 0

Los Angeles County Fire Department
Owner/Operator Identification

Beginning Date: 1/1/2011 Ending Date: 12/31/2011

Report #5314
V101026

OWNER FILE INFORMATION

Please clearly make changes/corrections.

Owner ID: OW0052272
Owner Name: VICTORIA PUBLIC GOLF, LLC
Dvr Lic No: State:
Owner DBA: LINKS AT VICTORIA
Tax ID :
Owner Address: 3550 WILSHIRE BLVD #1930
Owner Date of Birth:
LOS ANGELES, CA 90010
Work/Business Phone: Not Specified
Billing/Mailing Address: 8640 RUSH ST.
ROSEMEAD, CA 91770
ATTN/Care of: ARTURO FUERTES

FACILITY FILE INFORMATION

On Site Regulated Substances : Yes ___ No ___

Facility ID: FA0035930
Facility Name: LINKS AT VICTORIA
Site Location: 340 E 192ND ST
CARSON, CA 90746
Phone: 310-323-4174
Mailing Address: 340 E 192ND ST
CARSON, CA 90746
Operator/Care of: ARTURO FUERTES
E-Mail Address:
SIC Code: 7992
Operating Hours: Days: Hours:
Station: 116

Date First Became Operational:

ENVIRONMENTAL CONTACT INFORMATION

Contact Name: BRIAN WHANG
3550 WILSHIRE BLVD #1930
LOS ANGELES CA 90010
Phone : 213-368-1444

Dun & Bradst.: * Please Fill-Out

EMERGENCY CONTACT INFORMATION

	PRIMARY CONTACT:	SECONDARY CONTACT:
Name :	ARTURO FUERTES	MEL MATSUKANE
Title :	SUPERINTENDENT	GENERAL MGR
Business Phone :	310-532-7690	310-323-4174
24 - Hour Phone :	714-726-5233	Not Specified
Pager # :	Not Specified	Not Specified

ADDITIONAL INFORMATION

11 20-Jul-09

ASSESSORS PARCEL NUMBER: N/A

Certification: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this inventory and believe the information is true, accurate and complete.

Print Name of Document Preparer : DENNIS WESSELDINE

Signature of Owner/Operator : Mel Matsukane

Date: 11/28/11

CCP Status: 2010 7/20/2009 Received

SECOND NOTICE
WARNING!

The Los Angeles County Fire Department
Health Hazardous Materials Division has not received your
Hazardous Materials State Reporting Packet for reporting year 2010.

(As required in Chapter 6.95 of the California Health and Safety Code)

YOUR ACCOUNT WILL BE CHARGED A $285.00 LATE SUBMITAL FEE IF NOT RECEIVED BY DUE DATE.

FAILURE TO COMPLETE AND RETURN REQUIRED FORMS WILL RESULT IN FINES AND PENALTIES.

COMPLETE AND RETURN FORMS AS NECESSARY:

- Business Plan Annual Renewal Certification
- Owner/Operator Identification
- Hazardous Materials Inventory Statement
- Hazardous Materials Inventory-Chemical Description (available at website)
- Consolidated Contingency Plan (available at website)
- Hazardous Materials Site Map (available at website)
- Regulated Substance Registration (available at website)

ORIGINAL DATE & SIGNATURES REQUIRED

Will Result in Further Legal Action Including Fines and Penalties

RETURN BY: Friday, March 19, 2010

IT IS RECOMMENDED THAT YOUR BUSINESS PLAN ANNUAL RENEWAL CERTIFICATION BE SUBMITTED VIA CERTIFIED MAIL.

If you have any questions, please do not hesitate to call (323) 890-4000 between the hours of 9:00 am to 3:00 pm

If you need additional forms go to our website: *www.fire.lacounty.gov/HealthHazMat/HHMDForms.asp*

LOS ANGELES COUNTY CERTIFIED UNIFIED PROGRAM AGENCY
ADMINISTERED BY LOS ANGELES COUNTY FIRE DEPARTMENT

UNIFIED PROGRAM FACILITY PERMIT

FISCAL YEAR: July 1, 2009 - June 30, 2010

ISSUED TO: FA0035930
LINKS AT VICTORIA
340 E 192ND ST
CARSON, CA 90746

LA Co. CUPA NO. AR: AR0041536

FACILITY OWNER: VICTORIA PUBLIC GOLF, LLC

THIS PERMIT IS ISSUED FOR THE FOLLOWING PROGRAMS:

Administering Agency:	Program Description:
	CALIFORNIA ELECTRONIC REPORTING SURCHARGE
LA COUNTY FIRE DEPARTMENT	HAZARDOUS MATERIALS DISCLOSURE PROGRAM
LA COUNTY FIRE DEPARTMENT	HAZARDOUS WASTE GENERATOR PROGRAM

THIS PERMIT MUST BE CONSPICUOUSLY DISPLAYED AT THE FACILITY AT ALL TIMES.

ISSUED BY: P. Michael Freeman
County of Los Angeles Fire Chief

ISSUED ON: Feb 10, 2010

This permit is valid only for the above location and is subject to ALL REQUIRMENTS of State and Local Laws. The permit is non-transferrable and is void upon change in ownership or location.

Date run : 6/11/2009 12:52:48PM
Run by : RROSS
FA0035930 LINKS AT VICTORIA

LA County Fire Department
Facility Information Report

Report # : 5302
Page 1 of 3
Version 090604

OWNER FILE INFORMATION

* Clearly make changes/corrections here.

Owner ID: OW0052272 New Owner ID.
Owner Name: VICTORIA PUBLIC GOLF, LLC Tax ID :
Owner DBA: LINKS AT VICTORIA Drvr Licns :
Owner Address: 3550 WILSHIRE BLVD #1930
LOS ANGELES, CA 90010
Work/Business Phone: 213-368-1444
Billing/Mailing Address: 3550 WILSHIRE BLVD #1930
LOS ANGELES, CA 90010
ATTN/Care of: ARTURO FUERTES
Ownership Type:

FILE

FACILITY FILE INFORMATION

Facility ID: FA0035930 Account ID: AR0041536
Facility Name: LINKS AT VICTORIA
No. of Employee: 10
Site Location: 340 E 192ND ST
CARSON, CA 90746
Phone: 310-323-4174
Mailing Address: 340 E 192ND ST
CARSON, CA 90746
Operator/Care of: ARTURO FUERTES E-Mail Address:
District: SW - SOUTHWEST
City Code: CARS CARSON
CUPA Jurisdiction: CO
Operating Hours: Days Hours
SIC Code: 7992 - Public golf courses
Business Type / Code: 3 01 CORPORATION
Station: 116

GENERAL HEALTH PROGRAM ELEMENTS

Record ID	Current Program Element	Current Status	EPA #	Effective Date Beg.	Effective Date End	------- Changes ------- Program Element	Status
PR0057778	3001 - HM HANDLER, FEE GROUP 01	Active, billable		09/01/06			
PR0057779	1002 - HW GEN, 6-19 EMPLOYEES	Active, billable	CAL000310770	09/01/06			

Addition Program Element:

CA Waste Code					
RCRA Waste Code					
AMOUNT per quarter					
UNITS (PGTY) Pounds, Gallons, Tons, Yards					

CONSENT GIVEN BY: DENNIS WESSELDINE INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 145

1st DATE & TIME OF INSPECTION: 6/10/09 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

ENVIRONMENTAL CONTACT INFORMATION ** *For Haz Mat Handlers.*

Contact :Name: BRIAN WHANG
3550 WILSHIRE BLVD #1930
LOS ANGELES

Phone : 213-368-1444

Dun & Bradst.: * Please Fill-Out

Year:	CCP	Inventory
	2008	2008

EMERGENCY CONTACT INFORMATION

	PRIMARY CONTACT:	SECONDARY CONTACT:
Name :	ARTURO FUERTES	MEL MATSUKANE
Title :	SUPERINTENDENT	GENERAL MGR
Business Phone :	310-532-7690	310-323-4174
24 - Hour Phone :	714-726-5233	Not Specified
Pager # :	Not Specified	Not Specified

PREVIOUS INSPECTIONS

Activity Date	Program Element		Service	Result	Action	Activity Min	Travel Min	Inspector ID	Violation Code
03/07/2006	1001	PR0057779	053	01	00	15	0	EE0000058	
03/07/2006	3001	PR0057778	053	01	00	15	0	EE0000058	

VIOLATIONS LIST

Open	Activity Date	Program Element	Viol Status	Service	Result	Action	Violation Code	Violation Degree	Description

CONSENT GIVEN BY: DENNIS WESSELDINE INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 145

1st DATE & TIME OF INSPECTION: 6/10/09 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

Field Notes

LIST ORDER OF INSPECTION AS FOLLOWS: I. OPENING CONFERENCE II. WALK THROUGH III. DOCUMENTS IV. CLOSING CONFERENCE V. VIOLATIONS

I. OPENING CONFERENCE

DENNIS WESSELDINE - SUPERINTENDENT

-

- GOLF GROUNDS MAINTENANCE

- EQUIPMENT AND AUTO

* OIL CHANGES

* FILTERS

* WASTE FUEL

* FERTILIZERS

* GAS AND DIESEL

- ABOVEGROUND STORAGE 500G DIESEL AND 1000G GAS

* GOOD OIL

EMPLOYEES 13

II. WALK-THROUGH

-

- OXYGEN COMPRESSED 220

- ACETYLENE

PARTS WASHER

- 30 GALLONS

- SOLVENT

WASTE BATTERIES

-

- SPECIALTY BATTERIES

CONSENT GIVEN BY: DENNIS WESSELDINE INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 195

1st DATE & TIME OF INSPECTION: 6/10/09 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

Field Notes

LIST ORDER OF INSPECTION AS FOLLOWS: I. OPENING CONFERENCE II. WALK THROUGH III. DOCUMENTS IV. CLOSING CONFERENCE V. VIOLATIONS

2 X 55 GALLON SUPER PLUS SAE-40

METAL CONTAINER

- DRY

- ABOVEGROUND STORAGE TANK

3 X 55 GALLON METAL CONTAINER USED FOR USED OIL STORAGE

34 55 GALLON PLASTIC FERTMEC FERT.

METAL BIN STORAGE FOR LIQUID SMALL QUANTITY CONTAINERS

III. DOCUMENTS

① EPA ID # CAL000310770

② WASTE MANIFEST

6/8/09 230 GALLONS OILY WATER 004966500 JJK

6/8/09 500 GALLONS USED OIL 004962110 JJK

CONSENT GIVEN BY: DENNIS WESSELDINE INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 195

1st DATE & TIME OF INSPECTION: 6/10/09 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

Field Notes

LIST ORDER OF INSPECTION AS FOLLOWS: I. OPENING CONFERENCE II. WALK THROUGH III. DOCUMENTS IV. CLOSING CONFERENCE V. VIOLATIONS

IV. CLOSING CONFERENCE

ADVISED OPERATOR ON THE FOLLOWING:

a) HANDLING, STORAGE AND DISPOSAL OF HAZWASTE

b) SPCC REQUIREMENT

c) REVIEWED UP PACKET

V. VIOLATIONS

ISSUED NOV 30 DAYS FOR COMPLIANCE

CONSENT GIVEN BY: DENNIS WESSELDINE INSPECTOR SIGNATURE: RGarcia EMPLOYEE ID: 145

1st DATE & TIME OF INSPECTION: 6/10/09 2nd DATE & TIME OF INSPECTION:

3rd DATE & TIME OF INSPECTION:

LA County Fire Department
COMPLAINT FORM

Entered By : EE0000842 - CO, AUDREY

Report # : 5602
V080820

DATE: June 08, 2009

FROM: EE0000842 - CO, AUDREY
FMD - SB1082 REVENUE MGMT SECTION
PHN 323 881-2444; FAX 323 415-5742

COMPLAINT ID: CO0017387

FA0035930 - LINKS AT VICTORIA

OWNER INFORMATION

OW0042616 - PALMER GOLF MANAGEMENT CO
DBA : LINKS AT VICTORIA
Site Address : 3550 WILSHIRE BLVD # 1930
LOS ANGELES, CA 90010
Mailing Address: 340 E 192ND ST
CARSON,
Phone:

FACILITY INFORMATION

FA0035930 - LINKS AT VICTORIA
Location : AR0041536
Site Address : 340 E 192ND ST
CARSON, CA 90746
Mailing Address: 340 E 192ND ST
CARSON, CA 90746 USA
Phone: 1st: 310-532-7690

COMPLAINT ID NUMBER: CO0017387

Service Code: _____
Action Code: _____
Result Code: _____

COMPLAINT MODE : FMD REFERRAL

District : SW

SOURCE OF REQUEST:

Complainant: VICTORIA PUBLIC GOLF, LLC
Address: Address Not Specified

Home/Cell Phone : Phone Not Specified
Work Phone : Phone Not Specified
Email Address :

DESCRIPTION: *(Please clearly describe the changes / corrections.)*

STATUS : 12 - CHANGE IN OWNER

CUSTOMER REPORTED CHANGE IN OWNERSHIP VIA PAYMENT STUB ON FY08/09 BILL EFFECTIVE 9/1/06:
FROM: PALMER GOLF MANAGEMENT CO
TO : VICTORIA PUBLIC GOLF, LLC

PLEASE VERIFY & UPDATE FILES ACCORDINGLY. THANK YOU.

		Date / Time
Received by :	EE0000842 - CO, AUDREY	6/2/2009 12:43:40
Assigned to :	EE0000022 - SMITH, KEN	6/2/2009 12:44:31

COMPLETED

List dates times types of notices names address and phone numbers of people involved Describe conditions and actions taken.

Date :
Time In :
Time Out :
Hrs/Min :

6/10/09 CONDUCTED SITE VISIT TO VERIFY CHANGE OF OWNER. CONFIRMED OWNERSHIP CHANGE. SUBMITTED PAPERWORK TO ROSS TO UPDATE INFORMATION. ®

** PLEASE INDICATE THE EFFECTIVE DATE NOT THE SITE VISIT DATE**

Los Angeles County Fire Dept • Health Hazardous Materials Division
Certified Unified Program Agency • Participating Agency

REFER REPLY TO: RGARCIA

Southwest (Lomita) District Office
24330 Narbonne Avenue
Lomita, CA 90717
(310) 534-6270

INSPECTION REPORT

BUSINESS:	OWNER:	DATE:
LINKS AT VICTORIA	VICTORIA PUBLIC GOLF LLC	6/10/09
ADDRESS: 340 E. 192ND ST. CARSON CA 90746		FA 0035930

The following items, if applicable, have been inspected. This document constitutes a Summary of Violations and Notice to Comply if the violation (V) column is checked

Reference: Titles 19 and 22 of the California Code of Regulations (CCR). Chapters 6.5, 6.67, and 6.95 of the Health and Safety Code (HSC), and Titles 11 and 12 of the Los Angeles County Code (Co Ord)

	HAZARDOUS WASTE GENERATOR				HAZARDOUS WASTE GENERATOR		
	V	SUBJECT	SECTION		V	SUBJECT	SECTION
1		Hazardous waste determination	CCR 66262.11	24		Manifest copies retained for 3 years	CCR 66262.40(a)
2		Proper disposal of hazardous waste	HSC 25189.5 (a)	25		Consolidated manifest requirements	HSC 25160.2
3		Maintain/operate to prevent release/fire	CCR 66265.31	26		Hazardous waste transported by registered hauler	HSC 25163(a)
4		Hazardous waste labeling	CCR 66262.34(f)	27		LDR documents retained onsite	CCR 66268.7(a)(6)
5		Hazardous waste accumulation time	CCR 66262.34(a-d)	28		Hazardous waste analysis retained for 3 years	CCR 66262.40(c)
6		Hazardous materials storage and labeling	CCR 66261.2(f)	29		Personnel training	CCR 66265.16
7		Satellite accumulation	CCR 66262.34(e)	30		Contingency plan	CCR 66265.51
8		Containers leaking or not in good condition	CCR 66265.171	31		Emergency preparedness/prevention	CCR 66265.30-.37
9		Hazardous waste containers closed	CCR 66265.173(a)	32		Source Reduction requirements for LQGs	CCR 67100.3
10		Separation of incompatibles	CCR 66265.177	33		Biennial Report requirements	CCR 66262.40-.41
11		Retrograde/accumulated speculatively	CCR 66262.10	34		Excluded recyclable material management	HSC 25143.2/.9
12		Empty containers	CCR 66261.7	35		Recyclable Material Report	HSC 25143.10
13		Used oil management	CHSC 25250.4	36		Site assessment requirements	HSC 25187(a)(1)
14		Used oil filter management	CCR 66266.130	37		Closure requirements	CCR 66265.111/114
15		Used battery management	CCR 66266.81	38		Reckless management of hazardous waste	HSC 25189.6
16		Contaminated textile management	HSC 25144 6	39		Other violation(s)	
17		Container inspection - weekly	CCR 66265.174			**HAZARDOUS MATERIALS HANDLER**	
18		Tank inspection - daily	CCR 66265.195	50		Contingency plan/inventory submitted	HSC 25503.5
19		Tank operating requirements	CCR 66265.194	51		Plan and inventory updated & accurate	HSC 25505
20		EPA ID number[submit DTSC form 1358]	CCR 66262.12	52		Regulated substance registration	HSC 25533(a)
21		Hazardous waste transported with manifest	CCR 66262.20			**ABOVEGROUND PETROLEUM STORAGE TANK**	
22		Hazardous waste manifest complete	CCR 66262.23(a)	60	X	SPCC Plan Referral to RWQCB (213) 576-6600	HSC 25270.3
23		Manifest copies to DTSC	CCR 66262.23(a)(4)	70	X	**PERMIT REQUIRED** – Submit UP Forms	Co Ord 12.50.075 HSC 25404.1.1

☐ **NO SIGNIFICANT VIOLATIONS OBSERVED ON DATE OF INSPECTION.**

☒ **NOTICE TO COMPLY: THE VIOLATION(S) CITED MUST BE CORRECTED BY** 7/10/09 .

☒ **RETURN CERTIFICATION OF COMPLIANCE FOUND ON BACK OF THIS NOTICE.**

Attention: The items checked are in violation. A reinspection may occur at any time to verify compliance. Non-compliance could result in reinspection fees, permit revocation, and/or administrative/civil/criminal penalties. Any time granted for correction of the violation(s) does not preclude any enforcement action by this Department or other agencies.

#60 SPCC PLAN REFERRAL TO RWQCB HSC 25270.3

SUBMIT A SPCC PLAN FOR THE ABOVEGROUND STORAGE TANK FOR DIESEL FUEL AND GAS.

#70 SUBMIT UP FORMS

PROVIDE A COMPLETED UNIFIED PACKET FORMS.

Inspected By:	Consent Given By; Print Name:	Authorized Representative's Signature:
RGARCIA	x DENNIS WESSELDINE	x Dennis Wesseldine

UNIFIED PROGRAM (UP) FORM
BUSINESS ACTIVITIES

I. FACILITY IDENTIFICATION

FACILITY ID # 0 0 3 5 9 3 0 (1)

EPA ID # (Hazardous Waste Only) (2): CAL000 310770

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As) (3)

- LINKS AT VICTORIA

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page.

Does your facility...		If Yes, please complete these pages of the UPCF....
A. HAZARDOUS MATERIALS		
Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	☒ YES ☐ NO 4	4 HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION 4 CONSOLIDATED CONTINGENCY PLAN (Section I and Site Map(s)) 4 TRAINING PLAN
B. UNDERGROUND STORAGE TANKS (USTs)		
1. Own or operate underground storage tanks?	☐ YES ☒ NO 5	4UST FACILITY 4UST TANK (one page per tank)
2. Intend to upgrade existing or install new USTs?	☐ YES ☒ NO 6	4UST FACILITY 4UST TANK (one per tank) 4UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank)
3. Need to report closing a UST?	☐ YES ☐ NO 7	4UST TANK (closure portion –one page per tank)
C. ABOVE GROUND PETROLEUM STORAGE TANKS (APSTs)		
Own or operate APSTs above this threshold: ---the total capacity for the facility is greater than 1,320 gallons?	☒ YES ☐ NO 8	NO FORM REQUIRED TO CUPAs
D. HAZARDOUS WASTE		
1. Generate hazardous waste?	☒ YES ☐ NO 9	4 EPA ID NUMBER – provide at the top of this page 4 As a generator, answer YES to item E2b and complete Waste Generator Form
2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	☐ YES ☒ NO 10	4 RECYCLABLE MATERIALS REPORT
3. Treat hazardous waste on site?	☐ YES ☒ NO 11	4 ONSITE HAZARDOUS WASTE TREATMENT – FACILITY 4 ONSITE HAZARDOUS WASTE TREATMENT – UNIT (one page per unit)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	☐ YES ☒ NO 12	4 CERTIFICATION OF FINANCIAL ASSURANCE
5. Consolidate hazardous waste generated at a remote site?	☐ YES ☒ NO 13	4 REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION
6. Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned onsite?	☐ YES ☒ NO 14	4 HAZARDOUS WASTE TANK CLOSURE CERTIFICATION
E. LOCAL REQUIREMENTS (15)		
1. REGULATED SUBSTANCES		
Have Regulated Substances (RS) including Extremely Hazardous Substances (EHS) stored on site at greater than the threshold planning quantities established by the California Accidental Release Program (Cal ARP) ?	☐ YES ☒ NO 15a	In addition to Hazardous Materials requirements, complete: 4 Regulated Substance Registration 4 Risk Management Plan (when required)
2. OTHER REQUIREMENTS		
a. Have hazardous materials stored on site at or above a threshold amount established by a CUPA's or PA's local ordinance?	☒ YES ☐ NO 15b	4 Consult local CUPA or PA for added reporting requirements
b. Required by a CUPA or PA to provide other information?	☐ YES ☒ NO 15c	4 Waste Generator Form (LA County)

OFFICIAL USE ONLY	UP FORM	HW	HM	ARP	AST	UST	TP	CUPA	PA

Unified Program (UP) Form
CONSOLIDATED CONTINGENCY PLAN

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

I. FACILITY IDENTIFICATION

BUSINESS NAME 3		FACILITY ID # 1
LINKS AT VICTORIA		0035930
SITE ADDRESS 103	CITY 104	ZIP CODE 105
340 EAST 192ND STREET	CARSON	90746

II. EMERGENCY CONTACTS

PRIMARY		SECONDARY	
NAME	123	NAME	128
DENNIS WESSELDINE		MEL MATSUKANE	
TITLE	124	TITLE	129
SUPERINTENDENT		GENERAL MANAGER	
BUSINESS PHONE	125	BUSINESS PHONE	130
310-532-7690		310-323-4174	
24-HOUR PHONE	126	24-HOUR PHONE	131
760-908-9544		310-547-2676	
PAGER #	127	PAGER #	132

III. EMERGENCY RESPONSE PLANS AND PROCEDURES

A. Notifications

Your business is required by State Law to provide an immediate verbal report of any release or threatened release of a hazardous material to local fire emergency response personnel, this Unified Program Agency (CUPA or PA), and the Office of Emergency Services. If you have a release or threatened release of hazardous materials, immediately call:

FIRE/PARAMEDICS/POLICE/SHERIFF
PHONE: 911

AFTER the local emergency response personnel are notified, you shall then notify this Unified Program Agency and the Office of Emergency Services.

Local Unified Program Agency: (323) 890-4317
State Office of Emergency Service: (800) 852-7550
National Response Center: (800) 424-8802

Information to be provided during Notification:

- Your Name and the Telephone Number from where you are calling.
- Exact address of the release or threatened release.
- Date, time, cause, and type of incident (e.g. fire, air release, spill etc.)
- Material and quantity of the release, to the extent known.
- Current condition of the facility.
- Extent of injuries, if any.
- Possible hazards to public health and/ or the environment outside of the facility.

B. Emergency Medical Facility

List the local emergency medical facility that will be used by your business in the event of an accident or injury caused by a release or threatened release of hazardous material.

HOSPITAL/CLINIC:	PHONE NO:
COMMUNITY HOSPITAL OF GARDENA	310-715-1917
ADDRESS: 1246 WEST 155TH STREET	
CITY: GARDENA	ZIP CODE: 90247

OFFICIAL USE ONLY	DATE RECEIVED 9/1/09	REVIEWED BY RGarcia				
DIV	BN	STA	OTHER	DISTRICT	CUPA	PA

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

C. Private Emergency Response

DOES YOUR BUSINESS HAVE A PRIVATE ON-SITE EMERGENCY RESPONSE TEAM? ☐ Yes ☒ No

If yes, provide an attachment that describes what policies and procedures your business will follow to notify your on-site emergency response team in the event of a release or threatened release of hazardous materials.

CLEANUP/DISPOSAL CONTRACTOR

List the contractor that will provide cleanup services in the event of a release.

NAME OF CONTRACTOR:	PHONE NO:
EVERGREEN ENVIROMENTAL SERVICES	949-440-8300
ADDRESS: 16540 SOUTH SAN PEDRO ST.	
CITY: CARSON	ZIP CODE:

D. Arrangements With Emergency Responders

If you have made special (i.e. contractual) arrangements with any police department, fire department, hospital, contractor, or State or local emergency response team to coordinate emergency services, describe those arrangements on the lines below:

E. Evacuation Plan

1. The following alarm signal(s) will be used to begin evacuation of the facility *(check all which apply)*:

☒ Verbal ☒ Telephone *(including cellular)* ☐ Alarm System ☐ Public Address System ☐ Intercom
☐ Pagers ☐ Portable Radio ☐ Other *(specify)*:

2. ☒ Evacuation map is prominently displayed throughout the facility.

3. ☒ Individual(s) responsible for coordinating evacuation including spreading the alarm and confirming the business has been evacuated:

INDIVIDUAL RESPONSIBLE FOR COORDINATING THE EVACUATION WILL MEET AND WAIT OUTSIDE IN PARKING LOT AREA

F. Earthquake Vulnerability

Identify areas of the facility where releases could occur or would require immediate inspection or isolation because of the vulnerability to earthquake related ground motion.

☑ Hazardous Waste/ Hazardous Materials Storage Areas ☐ Production Floor ☐ Process Lines
☐ Bench/ Lab ☐ Waste Treatment ☐ Other:

Identify mechanical systems where releases could occur or would require immediate inspection or isolation because of the vulnerability to earthquake related ground motion.

☐ Utilities ☐ Sprinkler Systems ☐ Cabinets ☐ Shelves
☐ Racks ☐ Pressure Vessels ☑ Gas Cylinders ☐ Tanks
☐ Process Piping ☐ Shutoff Valves ☐ Other:

Unified Program (UP) Form
CONSOLIDATED CONTINGENCY PLAN

SECTION I: BUSINESS PLAN AND CONTINGENCY PLAN

G. Emergency Procedures

Briefly describe your business standard operating procedures in the event of a release or threatened release of hazardous materials:

1. **PREVENTION** (prevent the hazard) - Describe the kinds of hazards associated with the hazardous materials present at your facility. What actions would your business take to prevent these hazards from occurring? You may include a discussion of safety and storage procedures.

THE KINDS OF HAZARDS ASSOCIATED WITH THE HAZARDOUS MATERIALS IN MY FACILITY ARE SPILL AND LEAKS CONTAINERS ARE STORED AWAY FROM DRAINS, IN LEAK PROOF CONTAINERS WITH TIGHT FITING LIDS, AND HELD UNTIL LAWFULLY DISCARDED. INCOMPATIBLE MATERIALS AND WASTE ARE STORED SEPARATELY. EMPLOYEES ARE TRAINED IN THE PROPER HANDLEING OF MATERIALS AND SUPPLIED PROTECTIVE

2. **MITIGATION** (reduce the hazard) - Describe what is done to lessen the harm or the damage to person(s), property, or the environment, and prevent what has occurred from getting worse or spreading. What is your immediate response to a leak, spill, fire, explosion, or airborne release at your business?

CLOTHING.

SMALL SPILLS OF MINIMAL QUANITIES THAT ARE CONTAINED AND MITIGATED ONSITE BY BUSINESS EMPLOYEES. RESPONSE TO SMALL SPILS IS AS FOLLOWS: EVACUATE ANY UNNECESSARY EMPLOYEES FROM THE AREA OF SPILL. USING ABSORBENT MATERIALS, MAKE SURE THAT SPILLED MATERIAL IS CONTAINED AND PREVENTING FROM CONTAMINATING THE GROUND, SOIL, WATER OR DISCHARGE OFF OF PROPERTY. LARGE SPILS ARE SPILLS OF LARGER QUANITY THAT THE BUSINESS CANNOT CONTAIN WITH OUT ASSISTANCE AND INVOLVED QUANITIES OF SPILLED MATERIALS

3. **ABATEMENT** (remove the hazard) - Describe what you would do to stop and remove the hazard. How do you handle the complete process of stopping a release, cleaning up, and disposing of released materials at your facility?

(OVER)

THE RESPONSE TO A LIMITED SPILL IS THE FOLLOWING: EMPLOYEES INVOLVED IN THE CLEAN UP OF A SPILL WILL WEAR PROTECTIVE RUBBER GLOVES, SAFETY GLASSES AND ADDITIONAL CLOTHING. ABSORBED MATERIAL WILL BE PLACED IN A LEAK-PROOF CONTAINER THAT IS COMPATABLE TO THE WASTE. THE CONTAINER WILL HAVE A TIGHT FITING LID AND IS PROPERLY LABELED AS HAZARDOUS WASTE. THE WASTE WILL BE LAWFULLY DISPOSED AS HAZARDOUS WASTE. NECESSARY NOTIFICATIONS SHALL BE MADE TO THE HEALTH HAZARDOUS MATERIALS DIVISION OF THE LOS ANGELES COUNTY FIRE DEPT. AND TO THE STATE OFFICE OF EMERGENCY SERVICES

Shannon Castagno

From: Negrini, Camille <Camille.Negrini@fire.lacounty.gov>
Sent: Wednesday, June 13, 2018 2:50 PM
To: shannon@environmentalsupportservices.com
Subject: 18-2293
Attachments: 19200 S MAIN ST, GARDENA CA 90248 11 7 2016.pdf

The Los Angeles County Fire Department, Health Hazardous Materials Division, being the custodian or keeper of records, certify that a thorough search for the records you requested has been carried out.

Re: *(19200 S MAIN ST, GARDENA CA 90248)*

The record(s) found are attached to this email.

If you have any questions regarding your request, please contact our office at *(310) 534-6270.*

Los Angeles County Fire Department
Health Hazardous Materials Division
Inspection Section / Southwest District
HHMD Website

INSPECTION REPORT

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business: GOODYEAR AIRSHIP OPERATIONS		**Inspection Date:** 11/07/2016
Address: 19200 S MAIN ST	**City/State:** GARDENA CA 90248	**Telephone:** (310) 327-6565
Owner: THE GOODYEAR TIRE & RUBBER CO		**Email:** KENNY_ROGERS@GOODYEAR.COM
FA #: FA0017175	**Multi-program Inspection #:** QTZP-LPHI	**Inspection Type:** ROUTINE INSPECTION

☐ - NOTICE TO COMPLY/NOTICE OF VIOLATION.

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

Checklist: HW SQG
Checklist: HM
Checklist: AST Tier II

PROGRAM ELEMENT: HAZARDOUS MATERIALS HANDLER

RECORD ID: PR0004846

INSPECTED BY: JOJO COMANDANTE

OVERALL INSPECTION COMMENTS

Consent Given By:
Kenny Rogers
Airship Base Administrator

PROGRAM ELEMENT: HAZARDOUS WASTE GENERATOR

RECORD ID: PR0029257

INSPECTED BY: JOJO COMANDANTE

OVERALL INSPECTION COMMENTS

Consent Given By:
Kenny Rogers
Airship Base Administrator

PROGRAM ELEMENT: AST LESS THAN 10,000 GALLONS

RECORD ID: PR0058149

INSPECTED BY: JOJO COMANDANTE

OVERALL INSPECTION COMMENTS

Consent Given By:
Kenny Rogers
Airship Base Administrator

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business:	**FA #:**	**Date:**
GOODYEAR AIRSHIP OPERATIONS	FA0017175	11/07/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

Attention: Non-compliance could result in re-inspection fees, permit revocation, and/or administrative/civil/criminal penalties. A re-inspection may occur at any time to verify compliance. Any time granted for correction of the violation(s) does not preclude any enforcement action by this Department or other agencies.

It is improper and illegal for any County officer, employee or inspector to solicit bribes, gifts, or gratuities in connection with performing their official duties. Improper solicitations include requests for anything of value such as cash, discounts, free services, paid travel or entertainment, or tangible items such as food or beverages. Any attempt by a County employee to solicit bribes, gifts or gratuities for any reason should be reported immediately to either the County manager responsible for supervising the employee or the Fraud hotline at (800) 544-6861 or www.lacountyfraud.org. YOU MAY REMAIN ANONYMOUS.

Signatures

Kenny Rogers
Airship Base Administrator

Jojo Comandante
Supervising Haz Mat Specialist

PREVIOUS INSPECTIONS

Activity Date	PE	Rercord ID	Serial No.	Group Code	Service	Result	Action	Activity Min	Travel Min	Inspector ID
11/07/2016	1003		DA0855573		051	00	00	90	0	EE0000079
11/07/2016	3701	PR0058149	DAGTA8KBV	QTZP-LPHI	001	01	00	60	0	EE0000079
11/07/2016	3003	PR0004846	DALOWRXTK	QTZP-LPHI	001	01	00	30	0	EE0000079
11/07/2016	1003	PR0029257	DAX05J1DM	QTZP-LPHI	001	01	00	60	30	EE0000079

VIOLATIONS LIST

Open	Activity Date	Program Element	Viol Status	Service	Result	Action	Violation Degree	Comply on Date	Description

LOG SHEET

Tuesday, November 08, 2016 11:16 AM - JOJO COMANDANTE
Completed the inspection notes and made changes to the facility information in EC.
No violations observed.
No further action required.

INSPECTOR FIELD NOTES

November 7, 2016 - Routine inspection for HW, HM and AST by Jojo Comandante

Los Angeles County Fire Department - Health Hazardous Materials Division
Certified Unified Program Agency - Participating Agency
SouthWest District Office
24330 Narbonne Avenue,
Lomita, CA 90717
Telephone: (310) 534-6270 / Fax: (310) 539-6948
www.fire.lacounty.gov/hhmd

Business:	**FA #:**	**Date:**
GOODYEAR AIRSHIP OPERATIONS	FA0017175	11/07/2016

OUT = Out of Compliance COS = Corrected on Site RPT = Repeat Violation

Consent given by Kenny Rogers, Airship Base Administrator
Verified facility information, changes made to email address and no. of employees from 22 to 26, but still within the correct HW fee group of 20-100 employees (1003). Also updated environmental contact in EC.

Walkthrough revealed:
Facility is a landing service area for the Goodyear Blimp, which is used for television and other special events. The Blimp is used for 2- 10 landings a day and the facility operates 24/7.
1. Clean Housekeeping, no significant spill on the ground.
2. AST for 5200 gals of aviation fuel in secondary bermed containment - dry
3. Helium cylinders in locked "cage," they come in 6-packs for a total of around 102 cylinders. Helium needs to be replenished in the big balloon, apparently, because the balloon loses the gas in time.
4. HW storage area also in locked cage. Waste aviation fuel stored in 30-gal drum, generated when they take samples for testing.

Documents inspected include:
Manifests by Safety Kleen in a binder
CERS information fairly accurate
SPCC prepared by Bureau Veritas, last reviewed in March 2016

No significant violation observed.

Appendix C

Request for Records Search to the
Department of Toxic Substances Control – Cypress Office and
Response Obtained from that Agency

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
Tel) 949-429-3564 • Fax) 949-429-3563
www.EnvironmentalSupportServices.com • Info@EnvironmentalSupportServices.com

May 30, 2018

Dept of Toxic Substances Control
Cypress Office
5796 Corporate Avenue
Cypress, CA 90630

Attention: Julie Johnson/Jone Barrio

Dear Julie/Jone,

Please check for any files/information on the following site:

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

Sincerely,
Environmental Support Services

Shannon Castagno

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental

Barbara A. Lee, Director
5796 Corporate Ave
Cypress, California 90630

Edmund G. Brown Jr.
Governor

June 1, 2018

Ms. Shannon Castagno
Environmental Support Services
30251 Golden Lantern, #E-305
Laguna Niguel, CA 92677
Shannon@EnvironmentalSupportServices.com

PR4-053118-02

Dear. Ms. Castagno:

We have received your Public Records Act Request for records from the Department of Toxic Substances Control. After a thorough review of our files, we have found that we may have records pertaining to some of the sites/facilities referenced in your request.

- Yes: Victoria Golf Course, fka: BKK Carson Dump, 340 East 192nd St., check out our enviostor database, 85% + of documentation has been uploaded to our enviostor: ID (#19490191)

  You will find on E-stor, documents from 1983-2018, which you can view and download for this site. Hard copies: over 7" feet of documents: 1910 - 2016.

  No: 19200 S Main St, 7339-017-917

We would also like to inform you about Envirostor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: http://www.envirostor.dtsc.ca.gov/public.

If you have any questions, would like further information regarding your request or would like to set an appointment, please contact our Regional Records Coordinator at (714) 484-5336.

Sincerely,

Jone Barrio

Jone Barrio
Regional Records Coordinator
DTSC – Cypress Office

future request please: fax: 714.484.5318 or
email both: Jone.Barrio@dtsc.ca.gov & Julie.Johnson@dtsc.ca.gov

Appendix D

Request for Records Search to the
Department of Toxic Substances Control – Chatsworth Office and
Response Obtained from that Agency

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
Tel) 949-429-3564 • Fax) 949-429-3563
www.EnvironmentalSupportServices.com • Info@EnvironmentalSupportServices.com

May 30, 2018

Dept of Toxic Substances Control
Chatsworth Office
9211 Oakdale Avenue
Chatsworth, CA

Attention: Glenn Castillo/Robert Hardison

Dear Glenn/Robert,

Please check for any files/information on the following site:

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

Sincerely,
Environmental Support Services

Shannon Castagno

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

Shannon Castagno

From: Castillo, Glenn@DTSC <Glenn.Castillo@dtsc.ca.gov>
Sent: Thursday, May 31, 2018 11:32 AM
To: Johnson, Julie@DTSC; Barrio, Jone@DTSC
Cc: 'shannon@environmentalsupportservices.com'
Subject: FW: Public Records Request

Hello, ladies—

I'm forwarding this PRAR to your regional records office. According to EnviroStor, this site is in your jurisdiction. Thank you.

Aloha,
Glenn Castillo,
Regional Records Coordinator
glenn.castillo@dtsc.ca.gov
818.717.6522

From: Shannon Castagno [mailto:shannon@environmentalsupportservices.com]
Sent: Wednesday, May 30, 2018 6:19 PM
To: Castillo, Glenn@DTSC <Glenn.Castillo@dtsc.ca.gov>; Hardison, Robert@DTSC <Robert.Hardison@dtsc.ca.gov>
Subject: Public Records Request

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
Tel) 949-429-3564 • Fax) 949-429-3563
www.EnvironmentalSupportServices.com • Info@EnvironmentalSupportServices.com

May 30, 2018

Dept of Toxic Substances Control
Chatsworth Office
9211 Oakdale Avenue
Chatsworth, CA

Attention: Glenn Castillo/Robert Hardison

Dear Glenn/Robert,

Please check for any files/information on the following site:

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

Sincerely,
Environmental Support Services

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

Appendix E

Photocopies Obtained from the
Los Angeles County Public Works Department

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

DONALD L. WOLFE, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE EP-1
010001-036123

August 28, 2006

Mr. Mel Matsukane
General Manager, Victoria Golf Course
340 East 192nd Street
Carson, CA 90746-2207

Dear Mr. Matsukane:

HAZARDOUS MATERIALS UNDERGROUND STORAGE
CLOSURE CERTIFICATION
CLOSURE APPLICATION NO. 311167
FACILITY LOCATED AT 340 EAST 192ND STREET, CARSON

This office has reviewed the final closure report dated April 15, 2002, required as a part of the subject closure permit. Based on the information submitted, we find that all closure requirements have been completed. With the provision that the information provided to this agency was accurate and representative of existing conditions, it is our position that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code or Water Code for past, present, or future operations at this facility. Nor does it relieve you of the responsibility to cleanup existing, additional, or previously unidentified conditions at the facility, which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Additionally, be advised that changes in the present or proposed use of the site may require further site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings, or site usage.

If you have any questions, please contact Mr. John Awujo of this office at (626) 458-3507, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

DONALD L. WOLFE
Director of Public Works

TIM SMITH
Senior Civil Engineer
Environmental Programs Division

JA:cw
P:\Sec\Matsukane C494604

cc: California Regional Water Quality Control Board, Los Angeles Region (Yue Rong)

10001-36123

PARKS AND RECREATION

PARKS AND
RECREATION
301 N.Baldwin Avenue
Arcadia, California 91007

Phone: (626) 821-4611
FAX: (626) 445-3165
email: none

c 3447297

Letter of Transmittal

To: Mr. Tim Smith- LA County Dept. of Public Works
Environmental Program Division
900 South Fremont
Alhambra, CA 91803

From: **David J. Mesa Golf Project Coordinator** DJM.

Date: Monday, April 15,2002

Re: Victoria Golf Course
Tank Removal Project

We are transmitting to you by UPS (Comercial Graphics) the following information for the above referenced matter:

(1) copy — Underground Storage Tank Removal Closure Report as prepared by GeoKinetics, Inc. dated April 2001.

REMARKS: Per our phone conversation ,enclosed information is for your use. Please void our 2001-2002 invoice in the amount of $ 571.50.

OK
Tim

c: Steve Duron
Larry Lee

JOA/CLSR

10001-36123

10001-36123

RECEIVED
APR 16 2002
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

Victoria Golf Course



Underground Storage Tank Removal Closure Report

340 East 192nd Street Carson, California

GeoKinetics
Geotechnical & Environmental Engineers

Prepared By:
GeoKinetics, Inc.
15510 Rockfield Blvd., Suite C3
Irvine, CA 92618

Prepared For:
Parkway Construction and Associates inc.
1000 Civic Circle
Lewisville, Texas

April, 2001

GEOKinetics
Geotechnical & Environmental Engineers

15510 Rockfield Boulevard, Suite C
Irvine, California 92618

Tel 949.580.1818, Fax 949.580.1819
E-Mail: geokinetics@earthlink.net

UNDERGROUND STORAGE TANK REMOVAL CLOSURE REPORT

SITE LOCATED AT:

VICTORIA GOLF COURSE
340 EAST 192ND STREET
CARSON, CALIFORNIA

PREPARED FOR:

PARKWAY CONSTRUCTION & ASSOCIATES, INC.
1000 CIVIC CIRCLE
LEWISVILLE, TEXAS

APRIL 23, 2001

PREPARED BY: _____
Robert P McNeill
Project Manager, REA - 04797

APPROVED BY: _____
Glenn Tofani RCE/GE/REA
Principal Engineer

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Appendix II - Laboratory Analytical Results and Chain of Custody Records

Appendix III - Marine Chemist Certificate
Rinseate Uniform Hazardous Waste Manifests
Tank Destruction Certificate
Tank Degassing Permit

Appendix IV - Los Angeles County Public Works Permit Information
Los Angeles County Fire Department Permit Information
City of Carson Permit Information
Regional Water Quality Control Board Tank Registration Forms

1.0 INTRODUCTION

GeoKinetics is pleased to present this Underground Storage Tank (UST) Removal Closure Report for an 881 gallon UST at the Victoria Golf Course located at 340 East 192nd Street, Carson, California (Figure 1 - Site Location). GeoKinetics represented the project owner for the environmental monitoring, soil sampling, documentation, and Closure Report preparation associated with the UST removal. Our work was performed in general accordance with our proposal dated February 21, 2001, as subsequently authorized by Parkway Construction and included the following five general tasks:

No.	TASK	DESCRIPTION
1.	Permitting	Obtain all necessary City Building, County Public Health, and Fire Department permits, as required, including scheduling of required regulatory inspections.
2.	Evacuate Tank Contents	Expose top the of tank and degas as required by the South Coast Air Quality Management District's Rule 1166. Triple-rinse tank and transport rinseate to an approved disposal facility. Obtain tank inert certification by an authorized Marine Chemist.
3.	Tank Removal	Excavate soil around tank and expose for removal. Lift and remove tank and place tank on licensed transport vehicle. Transport and dispose of the UST at a licensed and approved disposal facility.
4.	Soil Sampling & Laboratory Analysis	Obtain soil confirmatory soil samples as required and transport to a certified laboratory for analysis. Laboratory analysis of soil samples in accordance with required protocol.
5.	Project Documentation	Document pertinent information such as location and alignment of tank, methods utilized by the contractor, tank degassing and cleaning procedures, and transportation records.
6.	Report Preparation	Provide this Closure Report presenting a description of site activities, laboratory results, and our findings.

This report presents the results of observations and sampling associated with the removal of the above referenced 881 gallon UST.

The Victoria Golf Course is presently undergoing renovation. As part of the redevelopment, the facility's Cart Storage Building is being upgraded and enlarged. In February 2001 during construction for planned renovations at the golf course, various portions of the existing golf course buildings were demolished. On February 20, 2001, the previously undiscovered UST was partially uncovered during excavation for a planned building addition at the existing Cart Storage Building Subsequent research by the current property managers indicated that the UST previously contained gasoline for refueling golf carts and had been out of service for approximately 13 years. Construction work was stopped in the area pending the removal of the tank.

2.0 LOCATION AND BACKGROUND OF FACILITY

2.1 Location of Facility

The subject property is a public golf course located in the north-western portion of the city of Carson within an older, well developed area (Figure 1). The property is trapezoidal in shape and is bounded on the north by 190th Street, on the east by Avalon Boulevard, and on the south by the Dominguez Channel. Goodyear's airship operations center is located immediately to the west. The UST discovered onsite is located within the golf course building complex on the east side of the site near 192nd Street. The approximate configuration of the tank location area is shown in Figure 2 of this report.

2.2 Background of Facility

According to the Golf Course Superintendent, Mr. Tom Russell, the course was originally constructed in the early 1960's. The subject tank was installed at that time. The course initially utilized gasoline powered golf carts but switched to electric powered carts in approximately 1987. The tank was removed from service at that time. A fuel dispenser located directly above the tank, was removed when the tank was removed from service. The current property management company assumed operation of the golf course in 1993 and was not aware of the presence of the tank.

3.0 GEOLOGY

3.1 Local Setting

The site lies within the Torrance 7.5 minute quadrangle at the base of the Dominguez Hills at an elevation of approximately 20 feet above MSL. The general topography of the site is level with a slight slope to the southwest. The surficial soil deposits at the site consist primarily of silty sands and sandy silt soils of varying thickness.

3.2 Hydrology

Based on groundwater basin maps (Reference 1), the site lies within the Los Angeles/ San Gabriel Hydrologic Unit, of the Lower San Gabriel Groundwater Basin at the Dominguez Channel. This basin is situated in southern Los Angeles County within the Los Angeles River Watershed. The principal water bearing formations of the basin are composed of unconsolidated and semi-consolidated sediments consisting of course gravels to fine-grained sands. The major sources of natural recharge are from the direct infiltration of rainfall and percolation of runoff from the near by Dominguez Hills to the north and Palos Verdes Hills to the south. Some recharge comes from imported water and infiltration of applied water (Reference 2).

According to the California Department of Water Resources, Division of Planning and Assistance, groundwater in this area is generally encountered between 90 to 100 feet below ground surface and has a flow direction towards Dominguez Channel to the southwest of the site.

4.0 TANK REMOVAL

4.1 Description of Field Activities

On February 21, 2001, GeoKinetics was retained by Parkway Construction to remove the underground storage tank. The following permits were obtained in conjunction with the tank removal:

PERMIT TYPE	AGENCY
Application for Closure, Hazardous Material Underground Storage Tank	Los Angeles County Department of Public Works, Environmental Programs Division (LADWP)
Permit for Authorization to Maintain Hazardous Materials Underground Storage Tanks	Los Angeles County Fire Department (LACFD)
Underground Storage Tank Permit Application - Form A and Form B	State Water Resources Control Board
Demolition Building Permit	City of Carson

The UST removal was performed under the regulatory guidance of the LADWP and LACFD. Appropriate tank registration and removal applications and permits are included in Appendix IV.

On February 22, 2001, in preparation for removal of the tank, JEM Industrial Services, a subcontractor to GeoKinetics, measured the diameter of the tank and performed a combustible gas concentration measurement of the atmosphere inside the tank. The tank measured 5 feet in diameter, was estimated to be approximately 12 feet long, and was initially estimated to be a 2,000 gallon tank. The tank did not contain any fluids. The combustible gas analyzer reading was 0% of the Lower Explosive Limit (LEL), indicating no residual explosive fumes were inside the tank.

During the period from February 23 through 24, 2001 approximately 0.68 inches of rain fell in the Carson area according to the Los Angeles County Department of Public Works, Hydraulic/Water Conservation Division, Daily Inspection Totals for the Active Rainfall Station #1113, Dominguez Water Company. Run-off flow in the area resulted in an accumulation of approximately 3,000 gallons of rainwater in the tank excavation. The rainwater entered the tank through the fill port while the tank was submerged--filling the tank. The tank did not float because approximately half of the tank was buried and the tank was attached to a concrete ballast slab located beneath the tank.

On March 14, 2001, the existing 881-gallon, single-wall, steel UST was removed (Figure 2 - Plot Plan). The following subcontractors performed services related to the tank removal as described below:

COMPANY	CONTRIBUTION
Pacific Southwest Group (PSG)	General Contractor
JEM Industrial Services Company	Excavation, rinsing, loading and transportation of the tank and waste liquids
CTL Environmental Services	Marine Chemist
The Reynolds Group	South Coast Air Quality Management District, Rule 1166 monitoring
Crosby-Overton in Long Beach	Disposal facility for the liquid wastes and rinseate
Pacific Recycling	Disposal facility for the tank
Del Mar Analytical Laboratories in Irvine	State Certified Laboratory for soil sample analysis

At the time of the tank removal, approximately 880 gallons of water had collected in the UST as a result of rain water infiltration through the fill port. This water was pumped into a tanker truck for disposal with the tank rinseate. The UST was then washed and rinsed by JEM Degassing. After cleaning, the tank was monitored by a Marine Chemist from CTL Environmental Services for combustible gas, visually inspected, and certified as inert (Appendix III - Marine Chemist Certificate). The UST was then excavated by a backhoe. The backfill soil in the tank excavation consisted of silty - sandy material around the tank. Excavation bottom and sidewall soils appear to consist primarily of silty clays. Groundwater was not encountered in the tank excavation. No free product was observed and no signs of contamination were evident in the tank excavation. The tank was lifted from the tank excavation, and loaded onto a flat bed transport truck by a crane. There were no holes, corrosion or signs of leakage associated with the tank. Because the dispenser was located directly above the tank, there was no associated product piping to be removed. There were no visible signs of damage or leaks in the tank which measured 5 feet in diameter by six feet in length.

The tank was subsequently transported by JEM Industrial Services Company to Pacific Coast Recycling, a licensed recycle facility, in Long Beach, CA, for disposal (Appendix III - Certificate of Recycle). Tank water and rinseate were transported under manifest as California Regulated Waste to Crosby-Overton in Long Beach, CA, an approved recycle facility (Appendix III - Non- Hazardous Waste Manifest).

Immediately after the tank removal, confirmatory soil samples were obtained within the tank excavation under the direction of the LACFD representative. The locations of these samples are shown in Figure 2. The soil samples were required by the LACFD to determine if a release of petroleum hydrocarbons from the UST system had occurred.

An organic vapor analyzer (OVA) calibrated with hexane at the site prior to the tank removal operation, was used to measure concentrations of volatile organic compounds in the air. OVA readings taken during the tank excavation and after the tank removal were consistent with background levels (i.e. 0 to 2 ppm). No evidence of soil staining or odor were encountered during the tank removal and sampling process.

Backfilling of the tank excavation was authorized by the LACFD and performed by JEM Industrial Services Company using a combination of stockpiled excavation soils and imported gravel.

4.2 Field Sampling

Field sampling included a water sample of the rainwater that had accumulated in the tank pit excavation and two confirmatory soil samples collected within the tank excavation as directed by the LACFD.

4.2.1 Rain-Water Sample

One water sample was obtained from the ponded rain-water within the tank excavation on February 26, 2001. This sample was collected into two 1- liter amber glass sample bottles and four 40 ml glass vials supplied by the analytical laboratory. No sheen, odor, or other evidence of contamination was apparent at the time of sampling. The sample containers were delivered under chain of custody protocol to Del Mar Analytical Laboratories in Irvine, CA, a State Certified Laboratory.

4.2.2 Soil Samples

As directed by LACFD, a total of two tank-closure confirmatory soil samples were collected within the tank excavation at locations as shown in Figure 2. No evidence of soil contamination within the excavation was observed during sampling.

The samples were collected from soils excavated with a backhoe bucket at locations specified by the LACFD. Soil samples were obtained according to EPA Test Method 5035 protocol utilizing sealed laboratory vials and a T-handle sample extractor. The sampling equipment was decontaminated between samples to prevent cross contamination. All samples were transported under chain of custody protocol to Del Mar Analytical Laboratories

5.0 LABORATORY ANALYTICAL RESULTS

Laboratory test methods for the tank closure confirmatory samples were determined by the LACFD (Appendix VI - Tank Abandonment Report Format). These tests included the following EPA methods: 8260B (gasoline range hydrocarbons, BTEX and MTBE); 8260B by GC/MS (volatile fuel hydrocarbons); 418.1 (Total Recoverable Petroleum Hydrocarbons) and 6010B (total lead). Table 1 presents a summary of the results of the laboratory analyses. Complete laboratory test data including QA/QC results, analyte detection limits, and Chain of Custody documents are included in Appendix II.

5.1 Tank Excavation Rain-Water Sample

The water sample was analyzed according to the same EPA testing methodologies described above without EPA Method 6010B. The laboratory sample results do not indicate an impact by petroleum hydrocarbons. Concentrations were below laboratory detection limits for all compounds analyzed (i.e. Gasoline range hydrocarbons, BTEX, MTBE, volatile fuel hydrocarbons, and TRPH).

5.2 Tank Excavation Soil Samples

Laboratory sample results indicate concentrations below laboratory detection limits for BTEX, MTBE, Volatile Fuel Hydrocarbons. Lead and TRPH concentrations are consistent with typical background levels at ~5 mg/kg and ~9mg/kg, respectfully.

TABLE 1 - TANK EXCAVATION SAMPLE RESULTS

Sample ID	Sample Matrix	Depth (ft.)	8260B					8260 GC/MS		Lead
			Benzene	Ethyl	Toluene	Total Xylenes	MTBE	Volitile Organics	TRPH 418.1	
W-1	Excavation Water	0	<2 ug/l	<2 ug/l	<2 ug/l	<2 ug/l	<5 ug/l	<50 ug/l	<1 mg/l	N/A
T-1	Soil	10	<2 ug/kg	<2 ug/kg	<2 ug/kg	<2 ug/kg	<5 ug/kg	<500 ug/kg	9.1	4.5
T-2	Soil	10	<2 ug/kg	<2 ug/kg	<2 ug/kg	<2 ug/kg	<5 ug/kg	<500 ug/kg	8.0	5.3

6.0 FINDINGS AND CONCLUSIONS

6.1 Findings

Based on the field observations during the UST removal and the analytical data obtained through soil sampling, we have reached the following conclusions:

- The backfill soil in the tank excavation consisted of silty - sandy material around the tank. Excavation bottom and sidewall soils appear to consist primarily of silty clays.

- Groundwater was not encountered in the tank excavation. No free product was observed and no signs of contamination were evident in the tank excavation.

- There were no holes, corrosion or signs of leakage associated with the tank.

- Laboratory soil sample results indicate no significant impact from petroleum hydrocarbons. Concentrations were below laboratory detection limits for all gasoline range hydrocarbons.

- Laboratory soil sample results indicate typical background concentrations of lead (i.e. ~5 mg/kg). This concentration is well below the Total Threshold Limit Concentration (TTLC) value of 1,000 mg/kg for lead.

6.2 Conclusions

The UST has been removed from the site. No piping was associated with the tank. Measured concentrations of hydrocarbon contaminants in the soil in the vicinity of the UST are well below regulatory action levels requiring remedial clean-up. No further action is necessary.

7.0 LIMITATIONS TO THE REPORT

7.1 General Limitations to the Report

The scope of this report is limited to the matters expressly covered. This report is prepared for the sole benefit of Parkway Construction and may not be relied upon by any other person or entity without the written authorization of GeoKinetics.

In preparing this report, GeoKinetics has relied on information derived from secondary sources and personal interviews. Except as set forth in this report, GeoKinetics has made no independent investigation as to the accuracy and completeness of the information derived from secondary sources or personal interviews, and has assumed that such information is accurate and complete.

It should be recognized that the definition and evaluation of geologic and hydrologic conditions, as well as the assessment of chemical fate and movement in these conditions are based upon limited field sampling as directed by others. All findings presented in this report are made with incomplete knowledge of the subsurface conditions present. More extensive studies may be performed to reduce these inherent uncertainties. No warranty, expressed or implied, is made.

All recommendations, findings and conclusions stated in this report are based upon facts and circumstances as they existed at the time that this report was prepared (e.g./Federal, State and Local laws, rules, regulations.) A change in any fact or circumstance upon which this report is based may adversely affect the recommendations, findings and conclusions expressed in this report.

We hope this information fulfills the needs of the project at this time. Please do not hesitate to contact the either of the undersigned if you have any questions or comments.

Respectfully Submitted:

GEOKINETICS
Prepared by:

Robert McNeill, REA
Project Manager

REGISTERED ENVIRONMENTAL ASSESSOR
ROBERT P. McNEILL
No. REA-04797
Expires: 6/01
STATE OF CALIFORNIA

GEOKINETICS
Reviewed By:

Glenn Tofani, RCE/GE/REA
Principle Engineer

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GLENN D. TOFANI
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GEOTECHNICAL
STATE OF CALIFORNIA

cc: Inspector Rick Lewis (Los Angeles County Fire Department)

8.0 REFERENCES

1. Los Angeles County Department of Public Works, Hydrologic Report, 1993-1994, Prepared by the Hydraulic/Water Conservation Division November 1995;

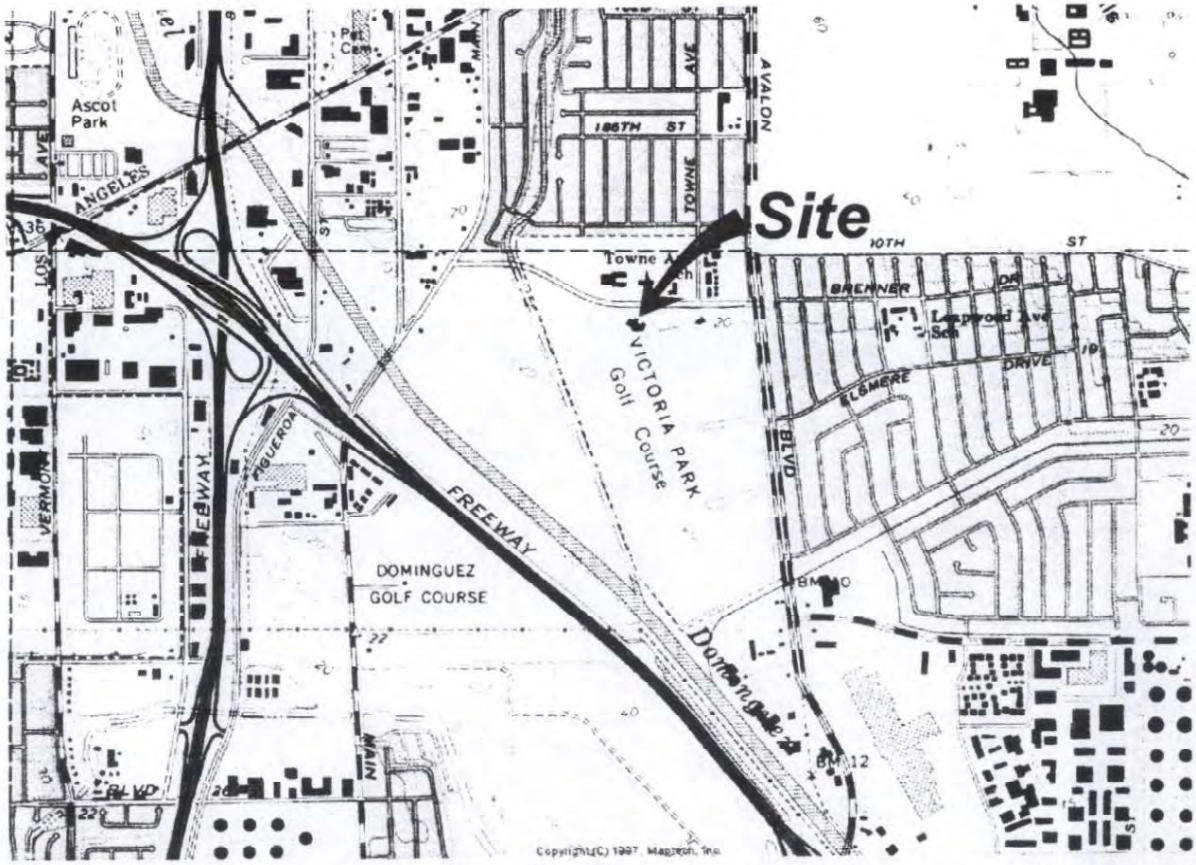
2. Los Angeles County Department of Public Works, June 1991. Hydrologic Report 1989-1990.

3. United States Department of the Interior Geological Survey, State of California Department of Water Resources, Geologic Map of the Torrance Quadrangle, 7.5 minute series, scale 1:24,000, dated 1981;

APPENDICES

APPENDIX I

FIGURES



N

0 2 4 Miles

Approximate Scale

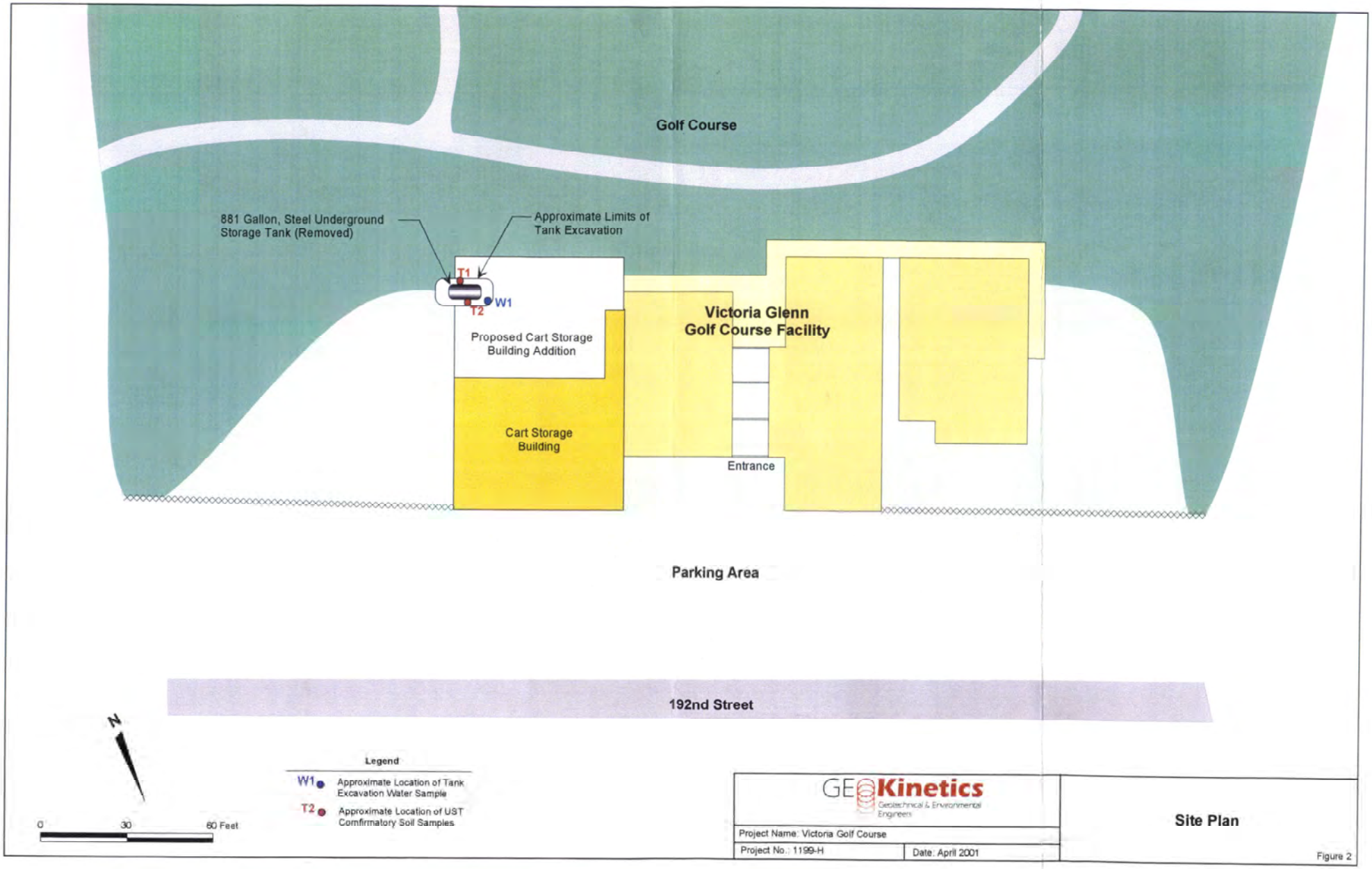
GEOKinetics
Geotechnical & Environmental Engineers

Project Name: Victoria Golf Course

Project No.: 1199-H | Date: April 2001

Site Location Map

Figure 1


Golf Course
881 Gallon, Steel Underground Storage Tank (Removed)
Approximate Limits of Tank Excavation
T1
T2
W1
Proposed Cart Storage Building Addition
Victoria Glenn Golf Course Facility
Cart Storage Building
Entrance
Parking Area
192nd Street
N
0
30
60 Feet
Legend
W1 Approximate Location of Tank Excavation Water Sample
T2 Approximate Location of UST Comfirmatory Soil Samples
GEOKinetics
Geotechnical & Environmental Engineers
Project Name: Victoria Golf Course
Project No.: 1199-H
Date: April 2001
Site Plan
Figure 2

APPENDIX II

ANALYTICAL RESULTS

Del Mar Analytical

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY REPORT

Prepared For: GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618

Attention: Bob McNeill
Project: Victoria Golf Course

Sampled: 02/26/01
Received: 02/26/01
Reported: 02/27/01

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

CA ELAP Certificate #1197
AZ DHS License #AZ0428

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
Sample ID: IKB0926-03 (Tank Pit 3 A-D - Water)								
Total Recoverable Hydrocarbons	EPA 418.1	I1B2730	1.0	ND	1	2/27/01	2/27/01	

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

VOLATILE FUEL HYDROCARBONS (EPA 5030B/8015B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/l	ug/l				
Sample ID: IKB0926-01 (Tank Pit 1 A-D - Water)								
Volatile Fuel Hydrocarbons	EPA 8015B	I1B2635	50	ND	1	2/26/01	2/26/01	QG
Surrogate: aaa-TFT (FID) (60-135%)				*85.9 %*				

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

BTEX and MTBE by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/l	ug/l				
Sample ID: IKB0926-02 (Tank Pit 2 A-D - Water)								
Benzene	EPA 8260B	I1B2709	2.0	ND	1	2/27/01	2/27/01	
Ethylbenzene	EPA 8260B	I1B2709	2.0	ND	1	2/27/01	2/27/01	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	I1B2709	5.0	ND	1	2/27/01	2/27/01	
Toluene	EPA 8260B	I1B2709	2.0	ND	1	2/27/01	2/27/01	
o-Xylene	EPA 8260B	I1B2709	2.0	ND	1	2/27/01	2/27/01	
m,p-Xylenes	EPA 8260B	I1B2709	2.0	ND	1	2/27/01	2/27/01	
Surrogate: Dibromofluoromethane (80-120%)				*104 %*				
Surrogate: Toluene-d8 (80-120%)				*104 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*96.8 %*				

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

METHOD BLANK/QC DATA

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1B2730 Extracted: 02/27/01										
Blank Analyzed: 02/27/01 (I1B2730-BLK1)										
Total Recoverable Hydrocarbons	ND	1.0	mg/l							
LCS Analyzed: 02/27/01 (I1B2730-BS1)										
Total Recoverable Hydrocarbons	4.48	1.0	mg/l	5.00		89.6	80-120			*M-NR1*
LCS Dup Analyzed: 02/27/01 (I1B2730-BSD1)										
Total Recoverable Hydrocarbons	4.21	1.0	mg/l	5.00		84.2	80-120	6.21	15	*M-NR1*

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Michele Harper
Project Manager Supervisor

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GeoKinetics
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Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030B/8015B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1B2635 Extracted: 02/26/01										
Blank Analyzed: 02/26/01 (I1B2635-BLK1)										
Volatile Fuel Hydrocarbons	ND	50	ug/l							QG
Surrogate: aaa-TFT (FID)	*9.73*		*ug/l*	*10.0*		*97.3*	*60-135*			
LCS Analyzed: 02/26/01 (I1B2635-BS1)										
Volatile Fuel Hydrocarbons	240	50	ug/l	220		109	70-125			QG
Surrogate: aaa-TFT (FID)	*9.19*		*ug/l*	*10.0*		*91.9*	*60-135*			
Matrix Spike Analyzed: 02/26/01 (I1B2635-MS1)					**Source: IKB0731-01**					
Volatile Fuel Hydrocarbons	245	50	ug/l	220	ND	108	65-130			QG
Surrogate: aaa-TFT (FID)	*9.37*		*ug/l*	*10.0*		*93.7*	*60-135*			
Matrix Spike Dup Analyzed: 02/26/01 (I1B2635-MSD1)					**Source: IKB0731-01**					
Volatile Fuel Hydrocarbons	268	50	ug/l	220	ND	118	65-130	8.97	20	QG
Surrogate: aaa-TFT (FID)	*9.41*		*ug/l*	*10.0*		*94.1*	*60-135*			

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Michele Harper
Project Manager Supervisor

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Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

METHOD BLANK/QC DATA

BTEX and MTBE by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1B2709 Extracted: 02/27/01										
Blank Analyzed: 02/27/01 (I1B2709-BLK1)										
Benzene	ND	2.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	5.0	ug/l							
Toluene	ND	2.0	ug/l							
o-Xylene	ND	2.0	ug/l							
m,p-Xylenes	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: Toluene-d8	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.0*		*ug/l*	*25.0*		*100*	*80-120*			
LCS Analyzed: 02/27/01 (I1B2709-BS1)										
Benzene	24.3	2.0	ug/l	25.0		97.2	75-130			
Ethylbenzene	27.1	2.0	ug/l	25.0		108	75-135			
Methyl-tert-butyl Ether (MTBE)	28.7	5.0	ug/l	25.0		115	65-135			
Toluene	25.1	2.0	ug/l	25.0		100	75-130			
o-Xylene	27.7	2.0	ug/l	25.0		111	75-130			
m,p-Xylenes	55.6	2.0	ug/l	50.0		111	75-135			
Surrogate: Dibromofluoromethane	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.9*		*ug/l*	*25.0*		*108*	*80-120*			
Matrix Spike Analyzed: 02/27/01 (I1B2709-MS1)					**Source: IKB0546-01**					
Benzene	22.1	2.0	ug/l	25.0	ND	88.4	70-140			
Ethylbenzene	24.8	2.0	ug/l	25.0	ND	99.2	80-135			
Methyl-tert-butyl Ether (MTBE)	19.8	5.0	ug/l	25.0	ND	79.2	65-150			
Toluene	23.1	2.0	ug/l	25.0	ND	92.4	75-135			
o-Xylene	25.1	2.0	ug/l	25.0	ND	100	75-150			
m,p-Xylenes	51.3	2.0	ug/l	50.0	ND	103	70-140			
Surrogate: Dibromofluoromethane	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: Toluene-d8	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course

Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

METHOD BLANK/QC DATA

BTEX and MTBE by GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1B2709 Extracted: 02/27/01										
Matrix Spike Dup Analyzed: 02/27/01 (I1B2709-MSD1)					**Source: IKB0546-01**					
Benzene	23.2	2.0	ug/l	25.0	ND	92.8	70-140	4.86	20	
Ethylbenzene	25.7	2.0	ug/l	25.0	ND	103	80-135	3.56	20	
Methyl-tert-butyl Ether (MTBE)	24.3	5.0	ug/l	25.0	ND	97.2	65-150	20.4	20	
Toluene	24.0	2.0	ug/l	25.0	ND	96.0	75-135	3.82	20	
o-Xylene	26.4	2.0	ug/l	25.0	ND	106	75-150	5.05	20	
m,p-Xylenes	53.2	2.0	ug/l	50.0	ND	106	70-140	3.64	20	
Surrogate: Dibromofluoromethane	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: Toluene-d8	*26.1*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.7*		*ug/l*	*25.0*		*107*	*80-120*			

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Client Project ID: Victoria Golf Course
Report Number: IKB0926

Sampled: 02/26/01
Received: 02/26/01

DATA QUALIFIERS AND DEFINITIONS

M-NR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
QG	Carbon range C6-C12 quantitated against a gasoline standard.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
NR	Not reported.
RPD	Relative Percent Difference

Del Mar Analytical, Irvine
Michele Harper
Project Manager Supervisor

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CHAIN OF CUSTODY FORM

Client Name/Address: GEOMATRIX 15501 N. ROCKFIELD #C3 IRVINE, CA

Project/PO Number: VICTORIA

Project Manager: BOB MCNEIL

Phone Number: 9495801818

Sampler: RPM

Fax Number: 9495801819

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives
TANK PIT 1 A-D	W	VOA	4	2/26	11:00	
TANK PIT 2 A-D	W	VOA	4	2/26	11:00	
TANK PIT 3 A-B	W	1L AMBER	2	2/26	11:00	

Analysis Required: 8015 8260 418.1

Special Instructions: PLEASE CALL W/RESULTS ASAP - THANK YOU

Relinquished By:	Date /Time: 2/26 13:53	Received by:	Date /Time:
Relinquished By:	Date /Time:	Received by:	Date /Time:
Relinquished By:	Date /Time:	Received In Lab By:	Date /Time: 2/26/01 1353

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours X 5 days ____
48 hours ____ normal ____

Sample Integrity: (Check)
Intact X on ice NO 17°C

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is

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LABORATORY REPORT

Prepared For: GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618

Attention: Bob McNeill
Project: Victoria Golf Course

Sampled: 03/13/01
Received: 03/13/01
Reported: 03/14/01

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

CA ELAP Certificate #1197
AZ DHS License #AZ0428

Del Mar Analytical, Irvine
Rachel Parker For Michele Harper
Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course
Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)

Analyte	Method	Batch	MDL Limit mg/kg	Reporting Limit mg/kg	Sample Result mg/kg	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IKC0495-01 (1 - Soil)									
Total Recoverable Hydrocarbons	EPA 418.1	I1C1470		5.0	**9.1**	1	03/14/01	03/14/01	
Sample ID: IKC0495-02 (2 - Soil)									
Total Recoverable Hydrocarbons	EPA 418.1	I1C1470		5.0	**8.0**	1	03/14/01	03/14/01	

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

Volatile Fuel Hydrocarbons by GC/MS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg	ug/kg				
Sample ID: IKC0495-01 (1 - Soil)									
Volatile Fuel Hydrocarbons	TPH by GC/MS	I1C1434	250	500	ND	1	03/14/01	03/14/01	
Surrogate: Dibromofluoromethane (85-125%)					*107 %*				
Surrogate: Toluene-d8 (80-120%)					*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*92.3 %*				
Sample ID: IKC0495-02 (2 - Soil)									
Volatile Fuel Hydrocarbons	TPH by GC/MS	I1C1434	250	500	ND	1.1	03/14/01	03/14/01	
Surrogate: Dibromofluoromethane (85-125%)					*106 %*				
Surrogate: Toluene-d8 (80-120%)					*107 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*94.2 %*				

Del Mar Analytical, Irvine
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Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

BTEX and MTBE by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg	ug/kg				
Sample ID: IKC0495-01 (1 - Soil)									
Benzene	EPA 8260B	I1C1434	0.57	2.0	ND	1	03/14/01	03/14/01	
Ethylbenzene	EPA 8260B	I1C1434	0.20	2.0	ND	1	03/14/01	03/14/01	
Toluene	EPA 8260B	I1C1434	0.21	2.0	ND	1	03/14/01	03/14/01	
o-Xylene	EPA 8260B	I1C1434	0.30	2.0	ND	1	03/14/01	03/14/01	
m,p-Xylenes	EPA 8260B	I1C1434	0.53	2.0	ND	1	03/14/01	03/14/01	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	I1C1434	0.74	5.0	ND	1	03/14/01	03/14/01	
Surrogate: Dibromofluoromethane (85-125%)					*107 %*				
Surrogate: Toluene-d8 (80-120%)					*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*92.3 %*				
Sample ID: IKC0495-02 (2 - Soil)									
Benzene	EPA 8260B	I1C1434	0.57	2.0	ND	1.1	03/14/01	03/14/01	
Ethylbenzene	EPA 8260B	I1C1434	0.20	2.0	ND	1.1	03/14/01	03/14/01	
Toluene	EPA 8260B	I1C1434	0.21	2.0	ND	1.1	03/14/01	03/14/01	
o-Xylene	EPA 8260B	I1C1434	0.30	2.0	ND	1.1	03/14/01	03/14/01	
m,p-Xylenes	EPA 8260B	I1C1434	0.53	2.0	ND	1.1	03/14/01	03/14/01	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	I1C1434	0.74	5.0	ND	1.1	03/14/01	03/14/01	
Surrogate: Dibromofluoromethane (85-125%)					*106 %*				
Surrogate: Toluene-d8 (80-120%)					*107 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)					*94.2 %*				

Del Mar Analytical, Irvine
Rachel Parker For Michele Harper
Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course
Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

METALS

Analyte	Method	Batch	MDL Limit mg/kg	Reporting Limit mg/kg	Sample Result mg/kg	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IKC0495-01 (1 - Soil)									
Lead	EPA 6010B	I1C1379		2.0	4.5	1	03/13/01	03/14/01	
Sample ID: IKC0495-02 (2 - Soil)									
Lead	EPA 6010B	I1C1379		2.0	5.3	1	03/13/01	03/14/01	

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

METHOD BLANK/QC DATA

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS (EPA 418.1)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1C1470 Extracted: 03/14/01											
Blank Analyzed: 03/14/01 (I1C1470-BLK1)											
Total Recoverable Hydrocarbons	ND	5.0		mg/kg							
LCS Analyzed: 03/14/01 (I1C1470-BS1)											
Total Recoverable Hydrocarbons	22.7	5.0		mg/kg	20.0		114	65-120			
Matrix Spike Analyzed: 03/14/01 (I1C1470-MS1)						Source: IKC0495-02					
Total Recoverable Hydrocarbons	27.2	5.0		mg/kg	20.0	8.0	96.0	25-125			
Matrix Spike Dup Analyzed: 03/14/01 (I1C1470-MSD1)						Source: IKC0495-02					
Total Recoverable Hydrocarbons	28.3	5.0		mg/kg	20.0	8.0	101	25-125	3.96	25	

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Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

METHOD BLANK/QC DATA

Volatile Fuel Hydrocarbons by GC/MS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1C1434 Extracted: 03/14/01											
Blank Analyzed: 03/14/01 (I1C1434-BLK1)											
Volatile Fuel Hydrocarbons	ND	500	250	ug/kg							
Surrogate: Dibromofluoromethane	*52.1*			*ug/kg*	*50.0*		*104*	*85-125*			
Surrogate: Toluene-d8	*52.6*			*ug/kg*	*50.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.1*			*ug/kg*	*50.0*		*92.2*	*80-120*			
LCS Analyzed: 03/14/01 (I1C1434-BS2)											
Volatile Fuel Hydrocarbons	864	500	250	ug/kg	1000		86.4	85-115			
Surrogate: Dibromofluoromethane	*49.7*			*ug/kg*	*50.0*		*99.4*	*85-125*			
Surrogate: Toluene-d8	*54.1*			*ug/kg*	*50.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.7*			*ug/kg*	*50.0*		*93.4*	*80-120*			

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

METHOD BLANK/QC DATA

BTEX and MTBE by GC/MS (EPA 5035/8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1C1434 Extracted: 03/14/01											
Blank Analyzed: 03/14/01 (I1C1434-BLK1)											
Benzene	ND	2.0	0.57	ug/kg							
Ethylbenzene	ND	2.0	0.20	ug/kg							
Toluene	ND	2.0	0.21	ug/kg							
o-Xylene	ND	2.0	0.30	ug/kg							
m,p-Xylenes	ND	2.0	0.53	ug/kg							
Methyl-tert-butyl Ether (MTBE)	ND	5.0	0.74	ug/kg							
Surrogate: Dibromofluoromethane	*52.1*			*ug/kg*	*50.0*		*104*	*85-125*			
Surrogate: Toluene-d8	*52.6*			*ug/kg*	*50.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.1*			*ug/kg*	*50.0*		*92.2*	*80-120*			
LCS Analyzed: 03/14/01 (I1C1434-BS1)											
Benzene	47.4	2.0	0.57	ug/kg	50.0		94.8	75-130			
Ethylbenzene	48.4	2.0	0.20	ug/kg	50.0		96.8	75-135			
Toluene	42.9	2.0	0.21	ug/kg	50.0		85.8	75-130			
o-Xylene	47.6	2.0	0.30	ug/kg	50.0		95.2	75-130			
m,p-Xylenes	101	2.0	0.53	ug/kg	100		101	75-135			
Methyl-tert-butyl Ether (MTBE)	44.0	5.0	0.74	ug/kg	50.0		88.0	65-135			
Surrogate: Dibromofluoromethane	*54.1*			*ug/kg*	*50.0*		*108*	*85-125*			
Surrogate: Toluene-d8	*52.0*			*ug/kg*	*50.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*50.9*			*ug/kg*	*50.0*		*102*	*80-120*			
Matrix Spike Analyzed: 03/14/01 (I1C1434-MS1)						**Source: IKC0495-01**					
Benzene	50.3	2.0	0.57	ug/kg	52.6	ND	95.6	45-140			
Ethylbenzene	51.5	2.0	0.20	ug/kg	52.6	ND	97.9	55-140			
Toluene	45.6	2.0	0.21	ug/kg	52.6	ND	86.7	50-140			
o-Xylene	50.9	2.0	0.30	ug/kg	52.6	ND	96.8	75-150			
m,p-Xylenes	109	2.0	0.53	ug/kg	105	ND	104	55-160			
Methyl-tert-butyl Ether (MTBE)	48.3	5.0	0.74	ug/kg	52.6	ND	91.8	65-155			
Surrogate: Dibromofluoromethane	*59.4*			*ug/kg*	*52.6*		*113*	*85-125*			
Surrogate: Toluene-d8	*55.0*			*ug/kg*	*52.6*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*52.8*			*ug/kg*	*52.6*		*100*	*80-120*			

Del Mar Analytical, Irvine
Rachel Parker For Michele Harper
Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

METHOD BLANK/QC DATA

BTEX and MTBE by GC/MS (EPA 5035/8260B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1C1434 Extracted: 03/14/01											
Matrix Spike Dup Analyzed: 03/14/01 (I1C1434-MSD1)						**Source: IKC0495-01**					
Benzene	44.9	2.0	0.57	ug/kg	47.6	ND	94.3	45-140	11.3	20	
Ethylbenzene	45.5	2.0	0.20	ug/kg	47.6	ND	95.6	55-140	12.4	20	
Toluene	40.8	2.0	0.21	ug/kg	47.6	ND	85.7	50-140	11.1	20	
o-Xylene	44.7	2.0	0.30	ug/kg	47.6	ND	93.9	75-150	13.0	20	
m,p-Xylenes	96.0	2.0	0.53	ug/kg	95.2	ND	101	55-160	12.7	20	
Methyl-tert-butyl Ether (MTBE)	44.7	5.0	0.74	ug/kg	47.6	ND	93.9	65-155	7.74	25	
Surrogate: Dibromofluoromethane	*53.6*			*ug/kg*	*47.6*		*113*	*85-125*			
Surrogate: Toluene-d8	*49.7*			*ug/kg*	*47.6*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*47.1*			*ug/kg*	*47.6*		*98.9*	*80-120*			

Del Mar Analytical, Irvine
Rachel Parker For Michele Harper
Project Manager Supervisor

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Haywenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1C1379 Extracted: 03/13/01											
Blank Analyzed: 03/14/01 (I1C1379-BLK1)											
Lead	ND	2.0		mg/kg							
LCS Analyzed: 03/14/01 (I1C1379-BS1)											
Lead	49.7	2.0		mg/kg	50.0		99.4	80-120			
Matrix Spike Analyzed: 03/14/01 (I1C1379-MS1)						**Source: IKC0435-01**					
Lead	49.6	2.0		mg/kg	50.0	ND	95.4	75-125			
Matrix Spike Dup Analyzed: 03/14/01 (I1C1379-MSD1)						**Source: IKC0435-01**					
Lead	48.8	2.0		mg/kg	50.0	ND	93.8	75-125	1.63	20	

Del Mar Analytical, Irvine
Rachel Parker For Michele Harper
Project Manager Supervisor

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GeoKinetics
15510 Rockfield Boulevard, Suite C
Irvine, CA 92618
Attention: Bob McNeill

Project ID: Victoria Golf Course

Rpt. Number: IKC0495

Sampled: 03/13/01
Received: 03/13/01

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

NR Not reported.

RPD Relative Percent Difference

Del Mar Analytical, Irvine
Rachel Parker For Michele Harper
Project Manager Supervisor

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9830 South 61st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
9484 Chesapeake Dr., Suite 808, San Diego, CA 92123 (858) 505-8696 FAX (858) 505-8699

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address: GeoKinetics

Project/PO Number: Victoria Golf

Project Manager: Bob McNeill

Phone Number: 949 580 1818

Sampler: J. Norman

Fax Number: 949 580 1819

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	418.1	Lead	8015g MH 3/13/01	8260B - BTEX/MTBE/TPH-G 3/13/01						Special Instructions
~~Soil~~ 1A	Soil	5035 Vial	1	3/13/01	3:00	ice			✓	✓						
1B									✓	✓						
1C									✓	✓						
1d		Jar					✓	✓								
1e							✓	✓								
1f		6" tube							✓	✓						
2A		5035 Vial							✓	✓						
2B									✓	✓						
2C									✓	✓						
2d		Jar					✓	✓								
2e							✓	✓								
2f		6" tube							✓	✓						

Relinquished By: Jann Norman Date/Time: 3/13/01 3:15PM

Received by: [signature] Date/Time: 3/13/01 3:45PM

Relinquished By: [signature] Date/Time: 3/13/01 4:15PM

Received by: Date/Time:

Relinquished By: Date/Time:

Received in Lab by: Laura Morgan Date/Time 3/13/01 16:15

Turnaround Time: (Check)
same day ___ 72 hours ___
24 hours X MH 3/13/01 5 days ___
48 hours ___ normal X

Sample Integrity: (Check)
Intact X on ice 2°

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

APPENDIX III

MARINE CHEMIST CERTIFICATE
UNIFORM HAZARDOUS WASTE MANIFEST
TANK DESTRUCTION CERTIFICATE
TANK DEGASSING PERMIT

TANK CERTIFICATION REPORT

CTL ENVIRONMENTAL SERVICES
24404 S Vermont Avenue, #307
Harbor City, CA 90710
TEL (310) 530-5006

TANK REMOVAL CERTIFICATE #
Date 3/12/01
Permit # 311166
Site Victoria Gold Corp.
Address of tank 340 192nd St.
Carson, CA
Client VEM Environmental

TANK DESCRIPTION	TANK SIZE	TANK NUMBER	TANK CONTENTS	RESULTS OF TANK INSPECTION
Steel/UST	1,000 gal	311166	gasoline	LEL 0%

The tank(s) described above has/have been inspected and found to be gas free based on readings obtained with an MSA type 2A Explosivity Meter (LEL of zero percent). A visual inspection has been made of the interior of the tank(s) and no visible contamination has been observed except as noted below

EXCEPTION None

The tank(s) described above is/are approved for removal and transportation

THE AMERICAN BOARD OF INDUSTRIAL HYGIENE INCORPORATED CERT. NO. #1973 1433 PENNSYLVANIA 1969 STUART E. SALOT, PH.D.

INSPECTED BY

CERTIFIED BY STUART E. SALOT, Ph.D., C.I.H.
CERTIFIED INDUSTRIAL HYGIENIST (#1973 & 1433)

4626

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: CAC002346119
Manifest Document No: 00100
2. Page 1 of 1

3. Generator's Name and Mailing Address: VICTORIA GOLF COURSE, L.L.C. 751 FORUM DRIVE SUITE 200 ORLANDO, FLORIDA 32821
4. Generator's Phone: (407) 926-2543

5. Transporter 1 Company Name: [illegible]
6. US EPA ID Number: [illegible]
A. Transporter's Phone: 562 [illegible]

7. Transporter 2 Company Name:
8. US EPA ID Number:
B. Transporter's Phone:

9. Designated Facility Name and Site Address: CROSBY & OVERTON 1630 W. 17TH STREET LONG BEACH, CALIFORNIA 90813
10. US EPA ID Number: CAD028409019
C. Facility's Phone: 562-432-5445

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE WATER	001	TT	0.09.00	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above:

E. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information:
WEAR RUBBER GLOVES AND SAFETY GLASSES
24 HOUR EMERGENCY CONTACT: BERNHARDT BRUNS (714) 920-9319

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Printed/Typed Name: BERNHARDT BRUNS ON BEHALF OF VICTORIA GOLF COURSE
Signature: [signature]
Month Day Year: 03 13 01

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOE BURGUEZ
Signature: [signature]
Month Day Year: 03 13 01

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

19. Discrepancy Indication Space
PROJ FP41 Name PSG Carson
C___ P___ R___

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19
OC/
Printed/Typed Name:
Signature:
Month Day Year:

GENERATOR

TRANSPORTER

FACILITY

PacificCoast

482 Pier T Avenue - Berth 118
Long Beach, California 90802
Phone (562) 628-8100
Fax (562) 435-0930

March 15, 2001

JEM Industries, Inc.
6978 Trabuco Road
Irvine, California 92618-1501

Dear Sir

This letter is to certify that on March 13, 2001, one (1) tank was removed from a Golf Course (address below) and transported by truck to our facility and destroyed on our property and reduced by shear for remelting purposes only

Job Site Victoria Golf Course
340 East 192nd Street
Carson, CA 90746

Transporter SO CAL Crane Service

Tank Size 1,000 Gallon
CTL Environmental Services
Tank Certification Report #06823

Very truly yours,

PACIFIC COAST RECYCLING, LLC

Ralph Garcia
Purchasing Agent

RG/pw

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 · http://www.aqmd.gov

PLAN ISSUE DATE: January 20, 2000

COMPANY I.D.: 84684

Mitigation Plan/Application No. 364166

Applicant: Jam Industries, Inc.
6978 Trabuco Rd.
Irvine, CA 92618

Attention: Mark A. Strocka
Phone: (949) 551-8114 Fax: (949) 551-8106

VARIOUS LOCATIONS
RULE 1166 CONTAMINATED SOIL MITIGATION PLAN

Reference is made to your application (A/N 364166) for the excavation and handling of VOC-contaminated soil at various locations within the South Coast Air Quality Management District.

In accordance with Rule 1166 (c), this approved plan is required prior to commencing excavation of any underground storage tank or transfer piping which has previously been used to store or transfer volatile organic compounds (VOC) and during the excavation, handling, or storage of VOC contaminated soils.

The rights and privileges granted through the issuance of this plan are restricted exclusively to the plan holder to whom it was issued and are non-transferable, even with the written or expressed consent of the plan holder listed above.

This excavation and mitigation plan has been approved under the provisions of Rule 1166 of the Rules and Regulations of the AQMD and is subject to the following conditions.

PLAN CONDITIONS:

SECTION I - GENERAL REQUIREMENTS

1. THIS EXCAVATION PLAN IS VALID FOR TWO YEARS FROM ISSUE DATE.
2. A SIGNED COPY OF THIS PLAN SHALL BE PRESENT AT EACH EXCAVATION SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
3. THIS PLAN IS NOT VALID FOR THE EXCAVATION OF VOC CONTAMINATED SOILS AT LANDFILLS OR SITES USED FOR DISPOSAL OF REFUSE OR OTHER TYPES OF WASTE.
4. THIS PLAN SHALL NOT BE USED IN CONJUNCTION WITH ANY ON-SITE TREATMENT PROCESS WITHOUT ADDITIONAL EVALUATION BY THE AQMD. THIS PLAN DOES NOT ALLOW THE TREATMENT OF VOC-CONTAMINATED SOIL BY CHEMICAL, BIOLOGICAL OR MECHANICAL PROCESSES. ANY OF THE ABOVE TREATMENT PROCESSES REQUIRES A PERMIT TO OPERATE FROM THE AQMD.

4 THIS PLAN SHALL NOT BE USED IN CONJUNCTION WITH ANY ON SITE TREATMENT PROCESS. SUCH ACTIVITIES REQUIRE SUBMITTAL OF A SITE SPECIFIC RULE 1166 MITIGATION PLAN. THIS PLAN DOES NOT ALLOW THE TREATMENT OF VOC-CONTAMINATED SOIL BY CHEMICAL, BIOLOGICAL OR MECHANICAL PROCESSES. ANY OF THE ABOVE TREATMENT PROCESSES REQUIRES A PERMIT TO OPERATE FROM THE AQMD

5 THE TOTAL QUANTITY OF VOC CONTAMINATED SOIL EXCAVATED AND HANDLED AT EACH SITE SHALL NOT EXCEED 2000 CUBIC YARDS. THIS TOTAL INCLUDES ANY VOC CONTAMINATED SOILS EXCAVATED FROM THIS LOCATION UNDER A VARIOUS LOCATION PLAN WITHIN THE LAST TWELVE (12) CALANDAR MONTHS. EXCAVATIONS INVOLVING QUANTITIES IN EXCESS OF 2000 CUBIC YARDS REQUIRES THE SUBMITTAL OF A SITE SPECIFIC RULE 1166 EXCAVATION PLAN

6 THE AQMD SHALL BE IMMEDIATELY NOTIFIED OF ANY COMPLAINTS RECEIVED AS A RESULT OF ACTIVITIES CONDUCTED UNDER THIS PLAN. SUCH NOTIFICATION SHALL INCLUDE THE NATURE OF THE COMPLAINT, NUMBER OF COMPLAINANTS AND THE ACTION TAKEN BY THE PLAN HOLDER TO MITIGATE THE SOURCE OF THE COMPLAINT

7 DURING EACH STEP OF THE PROCESS UPTO AND INCLUDING THE REMOVAL AND DISPOSAL PROCESS, ALL PRECAUTIONS AND MEASURES SHALL BE TAKEN TO MINIMIZE THE RELEASE OF VOC, ODOR AND DUST. THIS INCLUDES BUT IS NOT LIMITED TO THE USE OF ADDITIONAL PLASTIC SHEETING ON STOCKPILES, USE OF SUPPRESSANTS ON EXPOSED SOIL SURFACES & WORK AREAS AND MAINTAINING PAVED PUBLIC STREETS FREE OF SOIL DEPOSITS

SECTION II - PRIOR TO EXCAVATION

8. AT LEAST 24 HOURS PRIOR TO COMMENCING EXCAVATION OF UNDERGROUND TANKS OR TRANSFER PIPING WHICH HAVE STORED OR TRANSFERRED VOLATILE ORGANIC COMPOUNDS (VOC), THE EXECUTIVE OFFICER OR DESIGNEE SHALL BE NOTIFIED BY TELEPHONE OF ALL INFORMATION ITEMS LISTED IN RULE 1166(c)(1)(B), THE NAME OF THE COMPANY PERFORMING THE EXCAVATION, AND THE APPLICATION NUMBER LISTED ON THIS MITIGATION PLAN. THE NOTIFICATION SHALL BE MADE BY CALLING (909) 396-3886, DURING NORMAL BUSINESS HOURS. AT THE TIME OF THE NOTIFICATION, A REFERENCE NUMBER SHALL BE OBTAINED FROM THE AQMD AND RETAINED AS PROOF OF COMPLIANCE WITH THIS REQUIREMENT.

REFERENCE NO 5603 NOTIFICATION DATE: 2-28-01

9. COMPLETE VERIFICATION INFORMATION IN CONDITION NO. 29 AND OBTAIN REQUIRED SIGNATURES, PRIOR TO COMMENCING EXCAVATION.

SECTION III - EXCAVATION ACTIVITIES

10 DURING THE EXCAVATION PROCESS, AN ORGANIC VAPOR ANALYZER (OVA) SHALL BE ON SITE AT ALL TIMES. THE OVA SHALL BE MAINTAINED IN GOOD WORKING ORDER AT ALL TIMES AND SHALL BE CALIBRATED BY THE MANUFACTURER AT LEAST ONCE EVERY SIX MONTHS. THE CALIBRATION OF THE OVA SHALL BE VERIFIED USING CERTIFIED CALIBRATION GAS AT THE BEGINNING OF EACH WORKING DAY WITH THE PROCEDURES SPECIFIED BY THE MANUFACTURER. IF A CALIBRATION GAS OTHER THAN HEXANE IS USED, EACH MEASURED READING SHALL BE CORRELATED TO AND EXPRESSED AS HEXANE, USING EQUIVALENCY FACTORS PROVIDED BY THE MANUFACTURER

11 ALL MONITORING SHALL BE CONDUCTED AT A DISTANCE NO MORE THAN 3 INCHES ABOVE THE SOIL SURFACE USING AN OVA DESCRIBED IN CONDITION NO. 10 ABOVE. MONITORING SHALL BE CONDUCTED AT A MINIMUM FREQUENCY OF ONE READING FOR EVERY TWO CUBIC YARDS OF SOIL EXCAVATED, NOT TO EXCEED FIFTEEN MINUTES BETWEEN READINGS. ALL READINGS SHALL BE TAKEN NO LATER THAN THREE (3) MINUTES AFTER EACH LOAD OF SOIL IS EXCAVATED.

12 ALL MONITORING SHALL BE CONDUCTED BY TRAINED PERSONNEL WHO ARE PROFICIENT IN THE USE OF THE HYDROCARBON MONITOR SELECTED FOR USE AT THIS SITE.

13. WRITTEN RECORDS OF OVA MONITORING AND CALIBRATIONS REQUIRED ABOVE, SHALL BE KEPT IN A FORMAT APPROVED BY THE AQMD. THE APPROVED FORMAT IS INCLUDED ON PAGE 7 OF THIS PLAN. THE CERTIFICATION ON ALL RECORDS SHALL BE SIGNED AND DATED ON THE DAY THE MEASUREMENTS ARE OBSERVED.

14 UPON DETECTION OF VOC CONTAMINATED SOIL (READINGS 50 PPM OR GREATER), THE EXECUTIVE OFFICER OR DESIGNEE SHALL BE NOTIFIED WITHIN 24 HOURS OF THE FIRST DETECTION OF VOC CONTAMINATION. THE NOTIFICATION SHALL BE MADE BY CALLING (909) 396-3886. AT THE TIME OF THE NOTIFICATION, A REFERENCE NUMBER SHALL BE OBTAINED FROM THE AQMD AND RETAINED AS PROOF OF COMPLIANCE WITH THIS REQUIREMENT.

REFERENCE NO _____ NOTIFICATION DATE _____

15 ALL VOC-CONTAMINATED SOIL SHALL BE STOCKPILED SEPARATELY FROM NON-VOC-CONTAMINATED SOIL.

16. A STOCKPILE SHALL NOT CONTAIN MORE THAN 400 CUBIC YARDS OF SOIL.

17. IF THE OVA MEASUREMENT IS GREATER THAN 50 PPMV BUT LESS THAN 1000 PPMV, THE AFFECTED WORK AREA AND LOAD OF SOIL SHALL BE SPRAYED WITH WATER AND/OR APPROVED VAPOR SUPPRESSANT.

18 IF THE OVA MEASUREMENT EQUALS OR IS GREATER THAN 1000 PPMV,

A) THE AFFECTED SOIL AND WORKING AREA SHALL BE SPRAYED WITH WATER OR AN APPROVED VAPOR SUPPRESSANT, AND EITHER,

B) IMMEDIATELY PLACED IN AQMD APPROVED SEALED CONTAINERS, OR

C) DIRECTLY LOADED IN TRUCKS, MOISTENED WITH ADDITIONAL WATER, COVERED, AND TRANSPORTED IMMEDIATELY OFF SITE, OR

D) OTHER ALTERNATIVE STORAGE METHODS WITH PRIOR WRITTEN APPROVAL FROM THE AQMD

19 DURING EXCAVATION, THE ONLY EXPOSED VOC CONTAMINATED SOIL SHALL BE RESTRICTED TO THE IMMEDIATE WORKING AREA OF THE STOCKPILE ONLY. ALL OTHER PORTIONS OF THE STOCKPILE SHALL BE COVERED WITH PLASTIC SHEETING WITH SEAMS WHICH OVERLAP A MINIMUM OF TWELVE INCHES AND ARE SECURES WITH DUCT TAPE. ANY EXPOSED VOC-CONTAMINATED SOIL SURFACES (WORK FACE) SHALL BE KEPT MOIST WITH WATER OR OTHER APPROVED SUPPRESSANTS AT ALL TIMES, AND SHALL BE RECOVERED DURING PERIODS OF INACTIVITY LONGER THAN ONE (1) HOUR. AT THE END OF EACH WORKING DAY, ALL STOCKPILES SHALL BE COMPLETELY COVERED AND SECURELY ANCHORED TO PREVENT ANY EXPOSURE OF SOIL TO THE ATMOSPHERE.

20 ONCE COVERED WITH PLASTIC SHEETING, STOCKPILES SHALL REMAIN UNDISTURBED UNTIL BACKFILLED OR REMOVED FROM SITE.

South Coast Air Quality Management District — Expires July 1, 1999
VOC Contaminated Soil Mitigation Plan — R-237427

?? THIS PLAN IS NOT VALID UNTIL ALL PARTIES HAVE REVIEWED AND SIGNED THE VERIFICATION STATEMENT BELOW

VICTORIA GOLF COURSE		GOLF COURSE	
340 E. 190TH STREET		CARSON	
VICTORIA GOLF COURSE, LLC			310 323 4474
6751 FORUM DR #202		ORLANDO, FL.	32821

I CERTIFY THAT I HAVE REVIEWED AND UNDERSTAND THE CONDITIONS CONTAINED WITHIN THIS PLAN. IN SIGNING BELOW, I ACKNOWLEDGE THAT UNDER THE PROVISIONS OF RULE 1166, I CAN BE HELD RESPONSIBLE FOR THE REQUIREMENTS SET FORTH IN THIS PLAN

GEOKINETICS		3-12-01
[illegible]		/ /
JEM INDUSTRIES		03/13/01
GEOKINETICS		3-12-01

DEFINITIONS

Organic Vapor Analyzer (OVA) — For the purposes of this plan, is an hydrocarbon monitor utilizing flame ionization, photo ionization or other analytical methods complying with 40 CFR PART 60 APPENDIX A, EPA METHOD 21 SECTION 3, "DETERMINATION OF VOLATILE ORGANIC COMPOUND LEAKS. MONITORING INSTRUMENT SPECIFICATIONS The monitor shall be capable of being calibrated using hexane in a range of 0 parts per million by volume (PPMV) to 50 PPMV, and at a detection range of at least 10 PPMV to 1100 PPMV

Responsible Party — For the purposes of this plan, is the party financially responsible for executing the excavation. This may include the property owner or the tank operator This excludes contractors working for the property owner or operator, and any other party that lacks the direct authority to immediately treat all VOC contaminated soils generated at the excavation site

VOC Contaminated Soil — Is a soil which registers a concentration of 50 PPM or greater of volatile organic compounds, when measured at a distance of no more than three inches from the surface of the excavated soil, with an organic vapor analyzer or equivalent (calibrated to hexane) If other calibration gases are used, then the measured readings are correlated to and expressed as hexane

Volatile Organic Compound (VOC) — Any volatile compound of carbon, excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds as defined in Rule 102 – Definitions of Terms

Once issued, this plan is subject to further review by the AQMD and may be revoked if excavation activities are found in violation of plan conditions or AQMD's Rules and Regulations. Failure to comply with one or more of the conditions contained within this plan constitutes a violation of Rules 221 and 1166.

Other governmental agencies may require approval before any excavation begins. It shall be the responsibility of the applicant to obtain that approval. The South Coast Air Quality Management District shall not be responsible or liable for any losses because of measures required or taken pursuant to the requirements of this approved 1166 Contaminated Soil Mitigation Plan.

If you have any questions concerning this plan, please call Scott Caso at (909) 396-2218.

Very truly yours,
Tran Vo, P.E.
Senior A.Q. Engineer

APPENDIX IV

LOS ANGELES COUNTY PUBLIC WORKS PERMIT INFORMATION
LOS ANGELES COUNTY FIRE DEPARTMENT PERMIT INFORMATION
CITY OF CARSON PERMIT INFORMATION
REGIONAL WATER QUALITY CONTROL BOARD TANK REGISTRATION FORMS

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
DEVELOPMENT AND PERMITS TRACKING SYSTEM

DATE: 02/22/01 DPR4061
TIME: 17:35:00 PAGE 1
ROUTE TO: BS1205 REQUESTED BY: XXXXXXX

FEE RECEIPT

RECEIPT NUMBER: BS12050014607

THIS IS A RECEIPT FOR THE AMOUNT OF FEES COLLECTED AS LISTED BELOW. THE RECEIPT NUMBER, DATE AND AMOUNT VALIDATED HEREON HAS ALSO BEEN VALIDATED ON YOUR APPLICATION OR OTHER DOCUMENT AND HAS BECOME A PART OF THE RECORD OF THE COUNTY OF LOS ANGELES, FROM WHICH THIS RECEIPT MAY BE IDENTIFIED. PLEASE RETAIN THIS RECEIPT AS PROOF OF PAYMENT. ANY REQUEST FOR REFUND MUST BE MADE TO THE CITY, AND THEREFORE MUST REFERENCE THE CITY RECEIPT NUMBER.

DATE PAYMENT RECEIVED: 02/22/01
PROJ/APPL/IMPRV NBR: BL 0102220046
PROPERTY ADDRESS: 340 192 CRSN
RELATED PROJECT:
PAYOR NAME:
ADDRESS:

PHONE: EXTN:

FEE ITEM	FEE DESCRIPTION	STATISTICAL CODE	CALCULATION FACTOR	UNIT OF MEASURE	EXTENDED AMOUNT
AA	BLDG PERMIT ISSUANCE	A018303			$26.00
AE	STRONG MOTION OTHER	A018303	200.00	VALUATN	$0.50
D1	PLANCHECK W/O EN-HC	A019224	200.00	VALUATN	$100.98
D2	PERMIT W/O EN-HC	A018303	200.00	VALUATN	$53.40

TOTAL FEES PAID: $180.88

PAYMENT TYPE	CITY RECEIPT	AMT TENDERED	CHANGE GIVEN	AMOUNT APPLIED
PAID TO CITY	0106505	$180.88	$0.00	$180.88

CASHIER: MH

ITEMS WITH AN ASTERISK (*) WILL REQUIRE FURTHER DEPOSITS
WHENEVER ACTUAL COSTS EXCEED THE DEPOSIT AMOUNT

********** END OF REPORT **********

PERMIT APPLICATION SUPPLEMENT/NOTICE TO FILE
AUTHORIZATION TO MAINTAIN HAZARDOUS MATERIALS UNDERGROUND STORAGE TANKS
UNDER THE LOS ANGELES COUNTY UNIFIED PROGRAMS PERMIT

DUE DATE: 4/21/01

A 311165

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
Environmental Programs Division
900 South Fremont Avenue
Alhambra, CA 91803-1331
(626) 458-3517

RECEIVED
FEB 22 2001
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

DPW USE ONLY
FILE # 010001-036123
PERMIT # 311166
R/C CODE 22
SIC CODE
STATE ID #
TGP TGC

This form must accompany each tank permit application, or Unified Program Consolidated Form (UPCF) application to operate underground storage tanks
** See instructions on back of this form**

IF THERE ARE NO UNDERGROUND TANKS AT THIS FACILITY, GO TO PARTS F & G.

A OWNER INFORMATION

Victoria Golf Course
OWNER/FACILITY NAME

340 E. 192nd Street
MAILING ADDRESS

Carson CA 90746
CITY STATE ZIP

FACILITY ADDRESS

B

Application is hereby made for authorization to operate and maintain underground storage tanks within the Los Angeles County Unified Hazardous Materials Program jurisdiction.

NEW PERMIT APPLICATION ONLY
Number of tanks at facility 1
Federal Tax ID number Municipal
SIC Code

C Assessor parcel identification (obtain from property tax bill):

Map Book Number _____ Page Number _____ Parcel Number _____

D This supplement must be accompanied by:
(1) One copy of State Form "A", or UPCF - Tanks Page 1, facility/site information, for each site
(2) One copy of State Form "B", or UPCF - Tanks Page 2, tank permit application information, for each tank
(3) Certificate of Financial Responsibility.
(4) Hazardous Materials Underground Storage application fee (Complete Part E).

E Underground Storage Permit (HMUSP) fee schedule:

NUMBER OF TANKS:	HMUSP (APPLICATION FEE)
1	$41.00
2	$48.00
3	$55.00
4	$62.00
5	$69.00
6 or more tanks	$34.00 + $7.00 per tank = $

MAKE CHECKS PAYABLE TO: "LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORK"

Your annual permit maintenance fee, pro-rated quarterly through the next June 30th, plus a State service charge will be billed by the Los Angeles County Fire Department. All fees due must be paid prior to issuance of the Unified Program Permit authorizing the underground storage of hazardous materials.

F Facilities claiming an exemption to regulation must complete this section:

☐ There are not underground storage tanks within this facility.

☐ Final interceptor(s) regulated under industrial waste Permit No. _____.

☐ Underground containers within this facility are used only for emergency spill containment for above ground storage tanks.

☐ Other (attach a written statement).

G Tank owner/operator representative must complete this section (see back of form):

Signature _____ Title Director of Development

Print Name Christopher Hamill Date 2/21/01

CLOSURE PERMIT SUPPLEMENT
HAZARDOUS MATERIALS UNDERGROUND STORAGE
LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
900 S. FREMONT AVENUE
ALHAMBRA, CA 91803

Closure Permit No.: 311167
File No. I-0100 01-036123

PART 1 OF 2

To satisfy the permanent closure requirements for underground storage tanks previously storing hazardous materials, site integrity must be demonstrated by the analysis of soil samples and, if applicable, groundwater samples as outlined below. These requirements are in addition to the conditions listed on the Application for Closure or contained in an approved Closure Plan.

1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.

2. For each SP, samples shall be obtained at the following depths:

SP	Depth(s)	Compounds	Analysis Method
1A, 1B (gas, diesel, waste oil)	2'-4' under tank	TPHG(D), BTEX, MTBE, TRPH, org* lead	8015M, 8260B, 418.1
Dispensers	same	same	same (N/A)
Piping run ~~[illegible]~~ REP @ 20' interval	same	same	same (N/A)

* Organic lead - use approp DOHS method

NOTE: Must use ~~DOHS~~ EPA method 5035 for soil handling / preparation.

dn4/FPERMIT Rev. 3/90

Cont'd on Page 2

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

CLOSURE REPORT REQUIREMENTS

A closure report shall be submitted to the County of Los Angeles Department of Public Works, Environmental Programs Division, P.O. Box 1460, Alhambra, California 91802-1460, containing:

1. File number of facility and closure permit number.

2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.

3. Description of methods for obtaining, handling, and transporting samples.

4. Time and date samples were obtained.

5. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain-of-custody, and groundwater location) for UST closure shall be certified by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils. The certification must clearly state that all work was performed under the supervision of the person signing.

6. Chain-of-custody documentation initiated by person obtaining sample through person at CAL/EPA Department of Toxic Substance Control certified laboratory.

7. Disposal destination of tanks and evidence of legal disposal.

8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction, and methods of analysis.

9. Documentation as to depth of groundwater at facility.

10. Manifests to document hazardous waste disposal of any removed soil and tank rinsate.

11. Evidence of legal disposal of soils designated as nonhazardous.

12. Any observations of site contamination.

13. Remedial action plan to mitigate contamination.

14. Report to be signed by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils.

Print Name Jason Nevath

Signature [signature] Date 2-22-01

APPLICATION FOR CLOSURE
HAZARDOUS MATERIAL UNDERGROUND STORAGE TANKS
COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
900 SOUTH FREMONT AVENUE
ALHAMBRA, CA 91803-1331
(626) 458-3517

RECEIVED
FEB 22 2001
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

DPW USE ONLY
App. No. 311167
Site File 10001-36123 R/C 22
Fee $ 347.00
Check [X] Cash [ ]

TANK OWNER: Contact Name: ~~Geokinetics~~ Victoria Golf CCC - Victoria / Bob McNeill Phone. (949) 580-1818
Mailing Address: ~~15510 Rockfield Blvd~~ 6751 Forum Dr #200 City: ~~Irvine~~ Orlando State: ~~CA~~ FL Zip: ~~92618~~ 32821

FACILITY/SITE: Occupant Name: Victoria Golf Course Phone:
Site Address: 340 E 197ND City: CARSON State: CA Zip:
Mailing Address: City: State: Zip:
Contact Person: Thomas Russell Title: Grounds Superintendent

CONTRACTOR [ ] OWNER/OPERATOR AS CONTRACTOR [ ]
Contractor Name: Pacific Demolition Phone: 714-446-9316
State License No.: 746710 Class: ASB and C21
Hazardous Substance Removal Certified YES [X] NO [ ]

CLOSURE REQUESTED: Closure of tanks shall be in compliance with Title 23, Division 3, Chapter 16, California Code of Regulations and Chapter 6.7, Health & Safety Code, Article 7, Sections 2670 through 2672

[X] PERMANENT, TANK REMOVAL (See Section 2672(b))
How many underground storage tanks will remain after this closure?
[ ] PERMANENT, CLOSURE IN PLACE (See Section 2672(c)) - Attach Justification Statement
[ ] TEMPORARY, (See Section 2671)
[ ] Other:

PLOT PLAN ATTACHED [X] Showing existing tanks product piping & dispenser island. EXISTING HMUSP PERMIT NO.: 311166

TANK DESCRIPTION:

TANKS NO	*	TANK ID NO. (DPW USE ONLY)	CAPACITY GALLONS	MATERIALS STORED (PAST/PRESENT)	CLOSURE APPLICATION FEE
1			2,000	GASOLINE	$247.00
2					303.00
3					359.00
4					415.00
5					471.00
6 (+ ATTACH LIST)					$191.00 + $56.00/TANK =

* Compliance with December 22, 1998 Standards (See 2A on back)

	YES	NO
Has an unauthorized release ever occurred at this site?	[ ]	[X]
Have structural repair ever been made to these tanks?	[ ]	[X]
Will new underground tanks be installed after closure?	[ ]	[X]
Will any wells, including monitoring wells, be abandoned?	[ ]	[X]

NOTICE: CONTAMINATED TANKS AND RESIDUES THAT MAY BE LEFT IN TANKS TO BE CLOSED, MAY BE HAZARDOUS WASTE WHICH MUST BE TRANSPORTED AND DISPOSED OF PURSUANT TO CHAPTER 6.5, CALIFORNIA HEALTH AND SAFETY CODE, FAILURE TO COMPLY MAY BE PROSECUTED AS A FELONY VIOLATION.

By signature below the applicant certifies that all statements and disclosures above are true and correct and that they have read and agree to abide by this permit and all conditions and limitations attached.

Applicant's Signature [signature] Date 22 FEB 01
(Print Name) ROBERT P. McNEILL Phone 949-580-1818
Owner [ ] Operator [ ] Contractor [ ]

TO BE COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS

PURSUANT TO SECTION 11.80.070B, LOS ANGELES COUNTY CODE, PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS. ATTACHMENTS YES [ ] NO [ ]
THIS AUTHORIZATION EXPIRES June 22, 2001

HARRY W. STONE
Director of Public Works By: [signature] Date: 2/22/01

Complete Certification of Compliance with Los Angeles County Lobbyist Ordinance on back FORMAT DPW Rev. 7/00

[illegible] 010001-036123 [illegible] COUNTY DEPARTMENT OF PUBLIC WORKS RUN DATE: 02/22/01
A000311167 FEE RECEIPT FOR RUN TIME: 15:30:06
CLOSURE BY REMOVAL REPT: PWC225

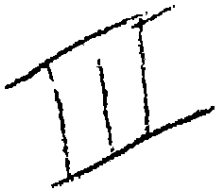
[illegible]EIVED FROM: VICTORIA GOLF COURSE
ADDRESS: 340 E 192ND ST
CARSON, CA 90746

AMOUNT PAID: $247.00 PAYMENT TYPE: OVER THE COUNTER CHECKS
DATE PAID: 02/22/01 DEPOSIT DATE: 02/22/01
REF #: 010222[illegible] PAYOR/COMMENTS: GEOKINETICS CK# 3878
RCPT #: 1000[illegible]1173 AREA: CITY OF CARSON

[illegible]IS SERVES AS AN AUTHORIZATION TO CLOSE AND/OR REMOVE THE TANKS LISTED BELOW
[illegible]BJECT TO THE ATTACHED REQUIREMENTS.

[illegible]#	TANK CONTENTS	OWNER TANK #	TANK CAPACITY
[illegible]			

[illegible]EIVED BY: IHEANACHO OFO



0A0001-036103 L.A. COUNTY DEPARTMENT OF PUBLIC WORKS RUN DATE: 02/22/01
A000311165 FEE RECEIPT FOR RUN TIME: 15:07:59
NPDES PERMIT RPT: PWL225

CEIVED FROM: VICTORIA GOLF COURSE
ADDRESS: 340 E 192ND ST
CARSON, CA 90746

MOUNT PAID: $41.00 PAYMENT TYPE: OVER THE COUNTER CASH
DATE PAID: 02/22/01 DEPOSIT DATE: 02/22/01
I.F #: 0A022999 PAYOR/COMMENTS: GEOKINETICS
RCPT #: 1000001172 AREA: CITY OF CARSON

EIVED BY: IHEANACHO OFO

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

TANK NO. 1

TANK REMOVAL VERIFICATION & SITE LOG

Date 13 MAR 01 Permit # 311167

Tank Site Occupant Name VICTORIA GOLF COURSE

Tank Site Address 340 E. 190TH STREET City CARSON Phone

Name of Contractor PACIFIC SOUTHWEST Licence No. 746710 A&B C-12 HAZ

Address 6978 TABUCO City IRVINE Phone 949 8510979

TANK STABILIZATION

	Time Completed	Contractors Signature
1. Remaining liquid removed through product lines.	N/A	
2. Dry ice added. (15# / 1000 gal., attach receipt.)	N/A	
3. Date gas analyzer last tested. (No more than 3 months old.)	3-12-01	
4. L.E.L. and O2 level readings.	0%LEL/20.9% O_2	

EXCAVATION

Continuous monitoring of vapor concentrations around the excavation site is required. Log readings below every 30 minutes.

Reading	Time	Signature
0 ppm	0730	
0 ppm	0800	
0 ppm	0830	
0 ppm	0900	

CERTIFICATION

Tank I.D. # EPA I.D. #
Tank size 853 GAL Tank type STEEL - SINGLE WALL
Tank cleaned by SEM INDUSTRIES Signature

CERTIFIED INDUSTRIAL HYGIENIST or **CERTIFIED MARINE CHEMIST** (Attach business card)

Name Stuart Eliot Signature
Time certified 11:45 A.M.

TRANSPORT (Attach copy of transportation manifest)

Tank transported by SOUTHERN CALIFORNIA CRANE
Transported to ~~PACIFIC SOUTHWEST METAL RECYCLING~~ PACIFIC COAST METAL RECYCLING Facility Phone # ~~626-444-9530~~ 562-628-8176

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
FIRE PREVENTION DIVISION

APPLICATION FOR PERMIT TO ABANDON OR REMOVE UNDERGROUND STORAGE TANK (S)

Date March 13, 2001

Tank Location: 340 E 192nd Street Carson

Occupant or Name of Company Victoria Golf Course

Name of Contractor Grokinectics

Address 15510 Rockfield Blvd Suite C Telephone No. 1949 5801818

1. Los Angeles County Department of Public Works Permit No. 311167
2. State Contractors License No. 746710 ASB Type C21
3. Environmental Protection Agency, Generator I.D. No. CAC 002 346-119
4. Contents of Tank (s) Empty
5. LEL and Oxygen Meter Calibration Date 0 ppm

Owner/~~Occupant~~ Representative

UNDERGROUND TANK Removal
WITNESSED R. LEWIS L.A. Co. F.D. #17
3/13/01

LA. COUNTY FIRE DEPARTMENT
FIRE PREVENTION DIVISION
701 E. Carson Street
P.O. Box 6234
Carson, CA 90749

COUNTY OF LOS ANGELES FIRE DEPARTMENT
UNDERGROUND TANK REMOVAL CHECK SHEET
TANK NOT CLEANED ON SITE

ADDRESS: _____

ITEMS COMPLETED IN THE OFFICE

	PERMIT PROVIDED FROM DEPT. OF PUBLIC WORKS, WASTE MANAGEMENT DIV.
	PERMIT COMPLETED FOR FIRE DEPARTMENT
	PERMIT PROVIDED FROM B&S (PROOF MAY BE PROVIDED AT SITE)

ITEMS TO BE VERIFIED IN THE FIELD

	PRIOR TO EXCAVATION
	SITE SAFETY PLAN
	NO SMOKING SIGNS POSTED
	BARRIERS FOR AROUND SITE
	NO SOURCE OF IGNITION WITHIN 50 FEET
	METER CALIBRATED (WITHIN LAST 3 MONTHS, WITH STICKER/TAG ON UNIT)
	OBTAIN RECEIPT FOR DRY ICE [MINIMUM OF 15 #s PER 1,000 GAL CAP]
	DE-GAS TANK(S)
	VERIFY READINGS FROM TANK(S) [LEL<10%, O2=0%]
	VERIFY HAZARDOUS MANIFEST FOR CONTENTS REMOVAL
	VERIFY HAZARDOUS ENDORSEMENT ON DRIVERS LICENSE(S) OF TRUCK DRIVER(S) FOR VACUUM TRUCK(S) OF ABOVE MATERIAL
	FOLLOWING EXCAVATION
	VERIFY READINGS FROM TANK(S) [LEL<10%, O2=0%]
	ALL OPENINGS SHALL BE CLOSED AND THE TANK(S) TO REMAIN INERT DURING TRANSPORT. ADD DRY ICE AS NEEDED. TANK(S) NEED NOT BE PLACARDED
	VERIFY UL TAG ID NUMBER ON TANK. IF NO UL TAG PRESENT ON TANK, ASSIGN NUMBER TO TANK. [DATE, AREA OFFICE #, AND INSPECTOR #. (ADD LETTER DESIGNATION IF MULTIPLE TANKS ON SITE)]
	HAVE ABOVE NUMBER SPRAY PAINTED, IN YELLOW, ON BOTH ENDS OF TANK(S).
	VERIFY HAZARDOUS MANIFEST FOR TANK(S)
	VERIFY HAZARDOUS ENDORSEMENT ON DRIVERS LICENSE(S) OF TRUCK DRIVER(S) HAULING TANK(S)
	OBTAIN COPY OF TANK SITE LOG(S) AND VERIFY ENTRIES
	LEAVE BUSINESS CARD AND REQUEST CLOSURE REPORT WITHIN 14 DAYS

REF: REGULATION 22 (02-01-89), FORM CREATED 11-01-94

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CITY OF CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1205

BUILDING PERMIT
DEMOLITION
BL 1205 0102220046

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:

OWNER:
VICTORIA GOLF COURSE
6751 FORUM DR.
CARASON, CA 90745
TEL. NO:
(949) 580-1818-

APPLICANT:
NARATE
15510 ROCKFIELD
IRVINE, CA
TEL. NO:
(949) 580-1818-

CONTRACTOR:
PACIFIC DEMOLITION
15510 ROCKFIELD BLVD.
IRVINE, CA
TEL. NO:
(949) 580-1818-
LIC. NO
746710 B

ARCHITECT OR ENGINEER:
TEL. NO:
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CMP:
,XX 04

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 23

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

STRUCTURE:	SQ. FT	NO. OF STORIES	CONST TYPE

EXIST BLDG USE: TANK USE ZONE:
EXIST OCC GRP:

BLDGS. NOW ON LOT: VALUATION:
200

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE			26.00
AE STRONG MOTION OTHER	200.00	VAL	0.50
D1 PLANCHECK W/ [illegible]	200.00	VAL	100.98
D2 PERMIT W/O [illegible]	200.00	VAL	53.40
	TOTAL FEES		180.88

[illegible] FILES

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192
CRSN CA
NEAREST CROSS STREET:
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
02/22/01	MK	08/21/01

FINAL DATE	FINAL BY:	CODE:

DESCRIPTION OF WORK
REMOVAL OF 1000 GALLON TANK

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
PEDESTRIAN PROTECTION		
SEWER DISCONNECTION		
ABANDON PRIVATE DISPOSAL		
UNDERGRND STRUCT REMOVAL AND SOIL RECOMPACTION		

CITY OF CARSON

Hours 7:00-6:00
Monday-Thursday
(310) 952-1766
FAX (310) 549-0652
701 E.Carson St.
Carson, CA 90745

INSPECTION RECORD

Job Address: 340 E. 192nd St.
Permit No: BLD0222098 Date: 8-22-8
Owner: Victoria Golf Club
Description: 1000 gallon tank

NO.	INSPECTION	DATE	INSPECTOR
	Building Inspections and Approvals		
B1	Location/Setbacks		
B2	Soils Engineer		
B3	Foundation/Forms		
B4	Retaining Walls		
B5	Masonry Walls		
B6	Bolts/Hld Dwns/Strps		
B7	Floor Slab & Steel		
B8	Raised Floor Framing		
B9	Underfloor Insulation		
B10	1st Floor Sheathing		
B11	2nd Flr Frame/Sheath		
B12	Window Replacement		
B13	Roof Sheathing		
B14	Masonry/Mfg Fireplace		
B15	Roof Covering		
B16	Frame/Bracing		
B17	Insulat/Weather Strip		
	Do Not Cover Walls Until Frame, Insulation, & Rough Electrical, Mechanical, & Plumbing Have Been Signed		
B18	Interior Lath/Drywall		
B19	Exterior Lath		
B20	T-Bar Ceiling		
B21	Rated Floor/Ceiling		
B22	Rated Walls		
B23	Rated Shafts		
B24	Disabled Access		
B25	Demolition		
B26	Lot Drainage		
B27			
B28	(Address posted) Enter Building Final Below		
	Electrical Inspections and Approvals		
E1	Temporary Power		
E2	Service/Ground ☐Location ☐UFER ☐Water Ground ☐Driven Rod		
E3	Underground Elect		
E4	Outlets		
E5	Rough Conduit		
E6	Rough Wiring		
E7	Dist Panel(s)		
E8	Rough Electrical		
E9	Smoke Detectors		
E10	Svr Ground Fault Test		
E11	Service Panel		
E12			
E13	**Electrical Final**		

NO.	INSPECTION	DATE	INSPECTOR
	Mechanical Inspections and Approvals		
M1	FAU/Wall Furnace		
M2	Exhaust Vent		
M3	Combustion Air		
M4	Duct Work		
M5	Rough Mechanical		
M6	AC/Compressor		
M7	Thermostat		
M8	Fire Dampers		
M9	Smoke Detectors		
M10	Commercial Hood		
M11	Boiler		
M12			
M13	**Mechanical Final**		
	Plumbing Inspections and Approvals		
P1	Water Service		
P2	Under Floor/Slab		
P3	Shower Pan		
P4	Water Lines		
P5	Rough Gas Piping		
P6	Rough Plumbing		
P7	Sewer (Public/Private)		
P8	Backflow Preventer		
P9	Water Heater		
P10	Lawn Sprinkler		
P11	Roof Drains		
P12	Gas (Test/Final)		
P13			
P14	**Plumbing Final**		
	Verify Other Approvals		
O1	Spec. Insp. Reports		
O2	Methane System		
O3	Grading Approval		
O4	Struct. Observation		
O5			
	Agency Approvals		
A1	Fire Department		
A2	Construction Division		
A3	Environmental Prog		
A4	Health Department		
A5	AQMD		
A6	Planning Dept.		
A7	Business License		
A8	CalTrans		
A9	Highway Dedica/Impr		
A10			
B28	**BUILDING FINAL**		
	Certificate of Occupancy		

POST THIS CARD AND THE APPROVED PLANS IN A CONSPICUOUS PLACE ACCESSIBLE TO THE INSPECTOR. IT SHALL BE THE DUTY OF THE APPLICANT TO CAUSE THE WORK TO REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES. PERMITS WILL BE VOIDED IF WORK IS NOT STARTED WITHIN 180 DAYS OR IS SUSPENDED FOR A PERIOD EXCEEDING 180 DAYS.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONE ITEM: [X] 1 NEW PERMIT [ ] 3 RENEWAL PERMIT [ ] 5 CHANGE OF INFORMATION [ ] 7 PERMANENTLY CLOSED SITE
[ ] 2 INTERIM PERMIT [ ] 4 AMENDED PERMIT [ ] 6 TEMPORARY SITE CLOSURE

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME: Victory Golf Course	NAME OF OPERATOR: [illegible]	
ADDRESS: 340[illegible] 192nd Street	NEAREST CROSS STREET: [illegible]	PARCEL (OPTIONAL)
CITY NAME: Carson	STATE: CA ZIP CODE: 90746	SITE PHONE # WITH AREA CODE: 310 323 4174

✓ BOX TO INDICATE: [ ] 1 CORPORATION [ ] INDIVIDUAL [ ] PARTNERSHIP [ ] LOCAL AGENCY [X] COUNTY AGENCY [ ] STATE AGENCY [ ] FEDERAL AGENCY
* If owner of UST is a public agency complete the following: name of supervisor of division, section or office which operates the UST: Steve Quinn
DISTRICTS

TYPE OF BUSINESS: [ ] 1 GAS STATION [ ] 2 DISTRIBUTOR [ ] 3 FARM [ ] 4 PROCESSOR [X] 5 OTHER	[ ] IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE: [illegible] E.P.A. I.D. # (optional): [illegible]

EMERGENCY CONTACT PERSON (PRIMARY)

DAYS: NAME (LAST, FIRST): Steve Quinn	PHONE # WITH AREA CODE: 626-821-4606
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

EMERGENCY CONTACT PERSON (SECONDARY) - optional

DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME: County of Los Angeles - Parks/Rec.	CARE OF ADDRESS INFORMATION: Steve Quinn	
MAILING OR STREET ADDRESS: 301 N. Baldwin Ave.	✓ box to indicate: [ ] INDIVIDUAL [ ] LOCAL AGENCY [ ] STATE AGENCY [ ] CORPORATION [ ] PARTNERSHIP [X] COUNTY AGENCY [ ] FEDERAL AGENCY	
CITY NAME: Arcadia	STATE: CA ZIP CODE: 91007	PHONE # WITH AREA CODE: 626-821-4606

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER: Same as property owner	CARE OF ADDRESS INFORMATION:	
MAILING OR STREET ADDRESS:	✓ box to indicate: [ ] INDIVIDUAL [ ] LOCAL AGENCY [ ] STATE AGENCY [ ] CORPORATION [ ] PARTNERSHIP [ ] COUNTY AGENCY [ ] FEDERAL AGENCY	
CITY NAME:	STATE: ZIP CODE:	PHONE # WITH AREA CODE:

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 44- [ ][ ][ ][ ][ ][ ] unknown

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED

✓ box to indicate: [ ] 1 SELF-INSURED [ ] 2 GUARANTEE [ ] 3 INSURANCE [ ] 4 SURETY BOND [ ] 5 LETTER OF CREDIT [ ] 6 EXEMPTION [ ] 7 STATE FUND
[ ] 8 STATE FUND & CHIEF FINANCIAL OFFICER LETTER [ ] 9 STATE FUND & CERTIFICATE OF DEPOSIT [X] 10 LOCAL GOVT MECHANISM [ ] 99 OTHER

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I [ ] II [X] III [ ]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE): [illegible] Christopher Hamill for Mayor.	TANK OWNER'S TITLE: Director of Development	DATE - MONTH/DAY/YEAR: 3/21/01

LOCAL AGENCY USE ONLY

COUNTY #: [ ][ ]	JURISDICTION #: [ ][ ][ ] 01101	FACILITY #: -3[illegible]7?
LOCATION CODE - OPTIONAL: 72	CENSUS TRACT # - OPTIONAL	SUPVISOR DISTRICT CODE - OPTIONAL

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

FORM A (6-95)

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: [X] 1 NEW PERMIT [ ] 2 INTERIM PERMIT [ ] 3 RENEWAL PERMIT [ ] 4 AMENDED PERMIT [ ] 5 CHANGE OF INFORMATION [ ] 6 TEMPORARY TANK CLOSURE [ ] 7 PERMANENTLY CLOSED ON SITE [ ] 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: Vitarra Golf Course

I. TANK DESCRIPTION
COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown	B. MANUFACTURED BY: Unknown
C. DATE INSTALLED (MO/DAY/YEAR) unknown	D. TANK CAPACITY IN GALLONS: un Known

II. TANK CONTENTS
IF A-1 IS MARKED, COMPLETE ITEM C.

A: [ ] 1 MOTOR VEHICLE FUEL [ ] 2 PETROLEUM [ ] 3 CHEMICAL PRODUCT [ ] 4 OIL [ ] 80 EMPTY [X] 95 UNKNOWN

B: [ ] 1 PRODUCT [ ] 2 WASTE

C: [ ] 1a REGULAR UNLEADED [ ] 1b PREMIUM UNLEADED [ ] 1c MIDGRADE UNLEADED [ ] 2 LEADED [ ] 3 DIESEL [ ] 4 GASAHOL [ ] 5 JET FUEL [ ] 99 OTHER (DESCRIBE IN ITEM D. BELOW) [ ] 6 AVIATION GAS [ ] 7 METHANOL [ ] 8 MBS

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. # :

III. TANK CONSTRUCTION
MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: [ ] 1 DOUBLE WALL [ ] 2 SINGLE WALL [ ] 3 SINGLE WALL WITH EXTERIOR LINER [ ] 4 SINGLE WALL IN A VAULT [ ] 5 INTERNAL BLADDER SYSTEM [X] 95 UNKNOWN [ ] 99 OTHER

B. TANK MATERIAL (Primary Tank): [ ] 1 BARE STEEL [ ] 2 STAINLESS STEEL [ ] 3 FIBERGLASS [ ] 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC [ ] 5 CONCRETE [ ] 6 POLYVINYL CHLORIDE [ ] 7 ALUMINUM [ ] 8 100% METHANOL COMPATIBLE W/FRP [ ] 9 BRONZE [ ] 10 GALVANIZED STEEL [X] 95 UNKNOWN [ ] 99 OTHER

C. INTERIOR LINING OR COATING: [ ] 1 RUBBER LINED [ ] 2 ALKYD LINING [ ] 3 EPOXY LINING [ ] 4 PHENOLIC LINING [ ] 5 GLASS LINING [ ] 6 UNLINED [X] 95 UNKNOWN [ ] 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: [ ] 1 POLYETHYLENE WRAP [ ] 2 COATING [ ] 3 VINYL WRAP [ ] 4 FIBERGLASS REINFORCED PLASTIC [ ] 5 CATHODIC PROTECTION [ ] 91 NONE [X] 95 UNKNOWN [ ] 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____
DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION
CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	A U 1 SUCTION	A U 2 PRESSURE	A U 3 GRAVITY	A U 4 FLEXIBLE PIPING	A (U) 99 OTHER Unknown
B. CONSTRUCTION	A U 1 SINGLE WALL	A U 2 DOUBLE WALL	A U 3 LINED TRENCH	A (U) 95 UNKNOWN	A U 99 OTHER
C. MATERIAL AND CORROSION PROTECTION	A U 1 BARE STEEL	A U 2 STAINLESS STEEL	A U 3 POLYVINYL CHLORIDE (PVC)	A U 4 FIBERGLASS PIPE	
	A U 5 ALUMINUM	A U 6 CONCRETE	A U 7 STEEL W/ COATING	A U 8 100% METHANOL COMPATIBLE W/FRP	
	A U 9 GALVANIZED STEEL	A U 10 CATHODIC PROTECTION	A (U) 95 UNKNOWN	A U 99 OTHER	

D. LEAK DETECTION: [ ] 1 MECHANICAL LINE LEAK DETECTOR [ ] 2 LINE TIGHTNESS TESTING [ ] 3 CONTINUOUS INTERSTITIAL MONITORING [ ] 4 ELECTRONIC LINE LEAK DETECTOR [ ] 5 AUTOMATIC PUMP SHUTDOWN [X] 99 OTHER unknown

V. TANK LEAK DETECTION

[ ] 1 VISUAL CHECK [ ] 2 MANUAL INVENTORY RECONCILIATION [ ] 3 VADOZE MONITORING [ ] 4 AUTOMATIC TANK GAUGING [ ] 5 GROUND WATER MONITORING [ ] 6 ANNUAL TANK TESTING [ ] 7 CONTINUOUS INTERSTITIAL MONITORING [ ] 8 SIR [ ] 9 WEEKLY MANUAL TANK GAUGING [ ] 10 MONTHLY TANK TESTING [X] 95 UNKNOWN [ ] 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR) Unknown "before 1990"	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING 0 GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? YES [ ] NO [X]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	DATE
Christopher Hamill	2/21/01

LOCAL AGENCY USE ONLY
THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
		-11000	-3612	3

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

APPLICATION FOR CLOSURE
HAZARDOUS MATERIAL UNDERGROUND STORAGE TANKS
COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
900 SOUTH FREMONT AVENUE
ALHAMBRA, CA 91803-1331
(626) 458-3517

RECEIVED
FEB 2 2 2001
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

DPW USE ONLY
App. No. 311167
Site File 10001-36123 R/C 22
Fee $ 347.00
Check [X] Cash [ ]

TANK OWNER. Contact Name: ~~Geokinetics~~ Victoria Golf CCC - Victoria / Bob McNeill Phone: (949) 580-1818
Mailing Address: ~~15510 Rockfield Blvd~~ 6751 Forum Dr #200 City: ~~Irvine~~ Orlando State: ~~CA~~ FL Zip: ~~92618~~ 32821

FACILITY/SITE. Occupant Name: Victoria Golf Course Phone:
Site Address: 340 E 197ND City: CARSON State: CA Zip:
Mailing Address: City: State: Zip:
Contact Person: Thomas Russell Title: Grounds Superintendent

CONTRACTOR [ ] OWNER/OPERATOR AS CONTRACTOR [ ]
Contractor Name: Pacific Demolition Phone: 714-446-9316
State License No.: 746710 Class: ASB and C21
Hazardous Substance Removal Certified YES [X] NO [ ]

CLOSURE REQUESTED: Closure of tanks shall be in compliance with Title 23, Division 3, Chapter 16, California Code of Regulations and Chapter 6 7, Health & Safety Code, Article 7, Sections 2670 through 2672

[X] PERMANENT, TANK REMOVAL (See Section 2672(b))
How many underground storage tanks will remain after this closure?
[ ] PERMANENT, CLOSURE IN PLACE (See Section 2672(c)) - Attach Justification Statement
[ ] TEMPORARY, (See Section 2671)
[ ] Other:

PLOT PLAN ATTACHED [X] Showing existing tanks product piping & dispenser island.

EXISTING HMUSP PERMIT NO.. 311166

TANK DESCRIPTION:

TANKS NO	*	TANK ID NO. (DPW USE ONLY)	CAPACITY GALLONS	MATERIALS STORED (PAST/PRESENT)	CLOSURE APPLICATION FEE
1			2,000	GASOLINE	$247.00
2					303.00
3					359.00
4					415.00
5					471.00
6 (+ ATTACH LIST)					$191.00 + $56 00/TANK =

* Compliance with December 22, 1998 Standards (See 2A on back)

	YES	NO
Has an unauthorized release ever occurred at this site?	[ ]	[X]
Have structural repair ever been made to these tanks?	[ ]	[X]
Will new underground tanks be installed after closure?	[ ]	[X]
Will any wells, including monitoring wells, be abandoned?	[ ]	[X]

NOTICE: CONTAMINATED TANKS AND RESIDUES THAT MAY BE LEFT IN TANKS TO BE CLOSED, MAY BE HAZARDOUS WASTE WHICH MUST BE TRANSPORTED AND DISPOSED OF PURSUANT TO CHAPTER 6.5, CALIFORNIA HEALTH AND SAFETY CODE, FAILURE TO COMPLY MAY BE PROSECUTED AS A FELONY VIOLATION.

By signature below the applicant certifies that all statements and disclosures above are true and correct and that they have read and agree to abide by this permit and all conditions and limitations attached.

Applicant's Signature [signature] Date 22 FEB 01
(Print Name) ROBERT P. McNEILL Phone 949·580·1818
Owner [ ] Operator [ ] Contractor [ ]

TO BE COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS

PURSUANT TO SECTION 11.80.070B, LOS ANGELES COUNTY CODE, PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS. ATTACHMENTS YES [ ] NO [ ]
THIS AUTHORIZATION EXPIRES June 22, 2001

HARRY W STONE
Director of Public Works By: [signature] Date: 2/22/01

Complete Certification of Compliance with Los Angeles County Lobbyist Ordinance on back FORMAT DPW Rev. 7/00

CLOSURE INFORMATION

1 This application is for authorization to temporarily or permanently close an underground storage tank (UST) pursuant to Los Angeles County Code, Title 11, Division 4, and California Code of Regulations, Title 23, Division 3, Chapter 16. This application may also be used for product piping removal associated with an existing or removed UST.

2. This application will not be approved unless a valid Hazardous Material Underground Storage Permit (HMUSP) or Unified Program Permit (Unified Permit) application is on file with the Department of Public Works (DPW). HMUSP registration fees may be waived, if the DPW finds that the subject USTs' . a.. Have been continuously empty and out of service since January 1, 1984; b. The owner or operator was never informed by DPW or any other agency of need to properly close USTs.

2A. Additional fees may be imposed for closure of UST's that were not in compliance with December 22, 1998, standards for upgrade or temporary closure.

3. USTs closed on site by removal or cleaning and filling with an inert solid material prior to January 1, 1984, need not comply with current closure requirements, however, leaks from such USTs must be reported and cleaned up.

4. This application must be accompanied by a State Water Resources Control Board UST permit application Form A for each site and Form B for each UST to be removed or closed.

5. All work shall be carried out in full compliance with all applicable Federal, State and local laws, ordinances, rules and regulations.

6. All fees due to DPW and/or the certified Unified Program Agency (CUPA) for the operation and/or maintenance of the facility subject to closure through the date of closure shall be paid.

7. All inspections notification(s) shall be made as directed by the attached conditions of this approval.

8 Within 30 days of the date of closure the applicant shall furnish the DPW a closure report describing all work done, results of any required sampling, disposition of any contaminated soils or materials found and all other requirement made part of the closure application.

9. In all cases, closure permits expire 180 days from the date of issue unless otherwise specified. It is the responsibility of the owner to make sure that the final report that contains the required information is submitted to the DPW within one month from the sampling date or 180 days from the date of the permit issuance, whichever is earlier. The total number of tanks listed on the HMUSP or Unified Permit and the yearly annual permit maintenance billing will remain unchanged until the closure report is received by the DPW. Only one copy of the closure report need be submitted unless otherwise directed.

10. All closure applications are site specific and may be subject to additional sampling and site characterization requirements as necessary to protect the public health and safety, underground and surface water supplies, and may include requirement requested by Federal, State or other regulatory agencies.

DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
900 SOUTH FREMONT AVENUE
ALHAMBRA, CA 91803-1331
(626) 458-3517

CERTIFICATION OF COMPLIANCE WITH LOS ANGELES COUNTY LOBBYIST ORDINANCE

This is to certify that I, as permit applicant, for the project located at _____
LOCATION ADDRESS

am familiar with the requirements of Los Angeles County Code Chapter 2.160 et seq., (relating to the Los Angeles County Lobbyist Ordinance) and all persons acting on behalf of myself have complied and will continue to comply therewith through the application process.

APPLICANT (PRINT NAME)	APPLICANT SIGNATURE
COMPANY NAME (If employed by an entity/agency)	DATE

CLOSURE PERMIT SUPPLEMENT
HAZARDOUS MATERIALS UNDERGROUND STORAGE
LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
900 S. FREMONT AVENUE
ALHAMBRA, CA 91803

Closure Permit
No.: 311167
File No.
I- 010001-036123

PART 1 OF 2

To satisfy the permanent closure requirements for underground storage tanks previously storing hazardous materials, site integrity must be demonstrated by the analysis of soil samples and, if applicable, groundwater samples as outlined below. These requirements are in addition to the conditions listed on the Application for Closure or contained in an approved Closure Plan.

1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.

2. For each SP, samples shall be obtained at the following depths:

SP	Depth(s)	Compounds	Analysis Method
1A, 1B (gas, diesel, waste oil)	2'-4' under tank	TPHG(D), BTEX, MTBE, TRPH, org* lead	8015M, 8260B, 418.1
Dispensers	same	same	same
Piping run @ 20' interval	same	same	same

* Organic lead - use approp Dotts method

NOTE: Must use EPA method 5035 for soil handling / preparation.

Cont'd on Page 2

3. All soil samples obtained shall be discrete, undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.

4. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most downgradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.

5. The analytical results for all soil samples shall be expressed milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Practical quantitation limits of 5-10 ug/kg (ppb) for volatile organics and 1 mg/kg (ppm) for the petroleum hydrocarbons must be achieved by the laboratory. Analytical results for groundwater samples shall be expressed in ug/l (ppb) and practical quantitation limits of .5-5 ug/l (ppb) for volatile organics, and 1 mg/l (ppm) for petroleum hydrocarbons must be achieved by the laboratory.

6. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determiantion; d) The method of analysis; e) Signature of chemist certifying results.

7. All soil/groundwater samples obtained shall be handled and transported to laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.

8. If the soil/groundwater analysis indicates undefined contamination at the facility, additional sampling shall be required to define the vertical and lateral extent present.

9. A final report that contains all of the above required information shall be submitted to the office above within one (1) month from the sampling date or 180 days from the date of this permit, whichever is earlier.

NOTIFICATION/PERMIT REQUIREMENTS

This Closure Authorization is issued subject to compliance with all applicable laws and regulations relating to the performance of work including, but not limited to, business license requirements, Building Codes, Fire Codes, Air Quality regulations, Health and Safety Codes, Water Codes, and Transportation regulations.

Pursuant to Los Angeles County Code, Section 11.78.045, and the Conditions and Limitations of the attached Hazardous Materials Underground Storage Closure Authorization, you are required to complete **ALL** of the agency notifications indicated below within the time period specified prior to commencement of work on this closure.

[X] 72 HOURS - DEPARTMENT OF PUBLIC WORKS INDUSTRIAL WASTE ENGINEERING INSPECTOR:

>>>Unless otherwise noted DPW inspectors are available at the following offices, Monday through Friday, between 8:00 a.m. and 9:30 a.m. **ONLY**.<<<

[ ] WHITTIER AREA - (562) 906-8426
13523 E. Telegraph Rd., Whittier, CA 90605-3437

[X] CENTINELA VALLEY AREA - (310) 534-4862 or 534-4859
24320 S. Narbonne Ave., Lomita, CA 90717-1194

[ ] LENNOX AREA - (310) 534-4862 or 534-4859
24320 S. Narbonne Ave., Lomita, CA 90717-1194

[ ] SAN GABRIEL VALLEY AREA - (626) 574-0962
125 S. Baldwin Ave., Arcadia, CA 91007-2652

[ ] SAN DIMAS AREA - M, W, & F - (626) 574-0961 or T & TH - (626) 961-9611
125 S. Baldwin Ave., Arcadia, CA 91007-2652

[ ] EAST LOS ANGELES AREA - (323) 260-3466
5119 E. Beverly Blvd., Los Angeles, CA 90022-3801

[ ] CITY OF COMMERCE - (323) 887-4456
2535 Commerce Way, Commerce, CA 90040-1487

[ ] NEWHALL AREA - (661) 222-2953
23757 W. Valencia Blvd., Santa Clarita, CA 91355-2192

[X] 48 HOURS (OR AS REQUIRED) - LOCAL FIRE DEPARTMENT FIRE PREVENTION INSPECTOR:

[ ] City of _____

[X] Los Angeles County Fire Department (310) 830-9596

[X] 24 HOURS - SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

(909) 396-3886

[ ] COUNTY SERVES AS BUILDING OFFICIAL, SEE ATTACHED.

FAILURE TO PROVIDE NOTICE AS REQUIRED ABOVE MAY RESULT IN PERMIT REVOCATION, ADDITIONAL SITE ASSESSMENT REQUIREMENTS, AND/OR ADMINISTRATIVE PENALTIES AS PROVIDED BY LAW.

NOTICE TO CLOSURE PERMIT APPLICANTS

The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective **August 6, 1988.**

In addition to the requirements of your Closure Permit, persons excavating any underground storage tank that previously contained VOC's must:

- Notify the SCAQMD Executive Officer by telephone at (310) 403-6000 24 hours prior to tank excavation. 1166(c)(1)(A)
- Monitor the excavated material during the excavation for VOC contamination. 1166(c)(1)(B)
- When VOC contamination is detected:
  - Cease excavation
  - Cover the contaminated soil until implementation of approved mitigation measures. 1166(c)(1)(C)
  - Notify the SCAQMD Executive Officer at (714) 396-2000 within 24 hours of detection of VOC contaminated soil. 1166(c)(2)(A)
- A person shall not engage in or allow any on-site or off-site spreading of VOC contaminated soil which results in uncontrolled evaporation of VOC to the atmosphere. 1166(c)(3)

Exemptions

- Treatment of less than one (1) cubic yard of contaminated soil. 1166(d)(1)(A)
- Decontamination of soil containing organic compounds that have initial boiling point of 302°F or greater, Reid Vapor Pressure less than 80mm Hg or Absolute Vapor Pressure less than 36mm Hg at 20°C. 1166(d)(1)(B),(F)
- Removal of soil for sampling purposes pursuant to EPA methods. 1166(d)(1)(C)
- Accidental spillage of five (5) gallons or less of VOC. 1166(d)(1)(D)
- Documentation of soil which is contaminated through natural seepage of VOC from oil and gas wells or other natural sources. 1166(d)(1)(E)

SPECIFIC QUESTIONS ON RULE 1166 SHOULD BE REFERRED TO THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (909) 396-2000

DIRECTORY OF LOS ANGELES COUNTY AND CONTRACT CITY BUILDING AND SAFETY OFFICES

*Unless specifically indicated, all field offices are open 8:00 a.m. to 4:30 p.m., Monday through Friday except legal holidays.**

CENTRAL OFFICE
900 S. Fremont Avenue, 3rd Floor
Alhambra, CA 91803
FAX (626) 458-2861
(Monday through Thursday 7:00 a.m. to 5:00 p.m., Closed Friday)

Building Section - (626) 458-3173
Electrical Section - (626) 458-3180
Mechanical/Plumbing Section - (626) 458-3182
Building Rehabilitation Section - (626) 458-3193
Research/Structural Section - (626) 458-3187
Grading/Statistics/Training - (626) 458-3189

COUNTY DISTRICT OFFICES

08.001 ANTELOPE VALLEY #8-4894
335A East Avenue K-8
Lancaster, CA 93535
(661) 723-4440 FAX (661) 723-4435

09.10 CALABASAS/MALIBU #8-861
4111 N. Las Virgenes Road
Calabasas, CA 91302
(818) 880 4150 FAX (818) 880-6279

13.00 CARSON (M-Th 7-6) #8-242
701 E. Carson Street (Closed Friday)
Carson, CA 90745
(310) 952-1766 FAX (310) 549-0652

06.00 EAST LOS ANGELES #8-027
5119 E. Beverly Boulevard
Los Angeles, CA 90022
(323) 260-3450 FAX (323) 267-4422

01.00 FIRESTONE #8-126
7807 S. Compton Avenue
Los Angeles, CA 90001
(323) 586-6541 FAX (323) 586-6525

02.00 LA PUENTE #8-886
16005 E. Central Avenue
La Puente, CA 91744
(626) 961-9611 FAX (626) 961-8166

12.001 LOMITA/LENNOX #8-1194
24320 S. Narbonne Avenue
Lomita, CA 90717
(310) 534-3760 FAX (310) 530-5482

05.00 SAN GABRIEL VALLEY #8-618
125 S. Baldwin Avenue
Arcadia, CA 91007
(626) 574-0941 FAX (626) 445-4425

08.20 SANTA CLARITA #8-470
23757 Valencia Boulevard
Valencia, CA 91355
(661) 222-2940 FAX (661) 222-2947

04.00 SOUTH WHITTIER #8-249
13523 Telegraph Road
Whittier, CA 90605
(562) 946-1390 FAX (562) 906-8425

09.00 UNIVERSAL #8-016
100 Universal City Plaza - MTB5 (Trailer)
Universal City, CA 91608 (Uninc. area only)
(818) 762-6284 FAX (818) 623-9829

* Inspector's office hours are 8:00 am - 9:00 am daily
† Office number
◆ Speed dial number

CONTRACT CITY OFFICES

04.091 ARTESIA (8-10) #8-2614
18747 Clarkdale Avenue
Artesia, CA 90701
(562) 865-6263 FAX (562) 865-6240

12.05 CARSON (M-Th 7-6) #8-242
701 E. Carson Street (Closed Friday)
Carson, CA 90745
(310) 830-7600 FAX (310) 513-6243

04.02 CERRITOS (8-5) #8-258
18125 Bloomfield Avenue
Cerritos, CA 90703
(562) 860-0311 FAX (562) 916-1371

06.01 COMMERCE #8-180
2535 Commerce Way
Commerce, CA 90040
(323) 887-4455 FAX (323) 888-6841

05.09 DUARTE (M-Th 7:30-6) #8-189
1600 Huntington Drive (Closed Friday)
Duarte, CA 91010
(626) 357-7931 FAX (626) 358-0018

02.03 INDUSTRY #8-886
15005 E. Central Avenue
La Puente, CA 91744
(626) 961-9611 FAX (626) 961-8166

05.08 IRWINDALE (M-Th 7-12) #8-687
5050 N. Irwindale Avenue (Closed Friday)
Irwindale, CA 91706
(626) 430-2200 FAX (626) 962-2018

09.01 LA CAÑADA FLINTRIDGE (8-10) #8-687
1327 Foothill Boulevard
La Cañada Flintridge, CA 91011
(818) 790-8651 FAX (818) 790-7536

04.01 LAKEWOOD (M-Th, Alt. F 7-5:30) #8-234
5050 N. Clarke Avenue (Closed Alt. Fridays)
Lakewood, CA 90712
(562) 866-9771 FAX (562) 866-0505

04.081 LA MIRADA (M-F 8-10, M-T 4-5:30)
13700 S. La Mirada Boulevard #8-2874
La Mirada, CA 90638
(562) 943-0131 FAX (562) 943-1464

07.01 LAWNDALE (7:30-11:30) #8-231
14717 S. Burin Avenue
Lawndale, CA 90260
(310) 970-2100 FAX (310) 644-4556

12.04 LOMITA #8-110
24320 S. Narbonne Avenue
Lomita, CA 90717
(310) 534-3760 FAX (310) 530-5482

12.02 ROLLING HILLS #8-110
24320 S. Narbonne Avenue
Lomita, CA 90717
(310) 534-3760 FAX (310) 530-5482

12.03 ROLLING HILLS ESTATES #8-110
24320 S. Narbonne Avenue
Lomita, CA 90717
(310) 534-3760 FAX (310) 530-5482

04.08 SANTA FE SPRINGS (8-4) #8-262
11710 E. Telegraph Road
Santa Fe Springs, CA 90670
(562) 868-0511 FAX (562) 868-7112

05.08 TEMPLE CITY (8-12) #8-038
9701 Las Tunas Drive
Temple City, CA 91780
(626) 285-0488 FAX (626) 285-8192

09.02 WESTLAKE VILLAGE #8-861
4111 N. Las Virgenes Road
Calabasas, CA 91302
(818) 880-4150 FAX (818) 880-6279

ENVIRONMENTAL PROGRAMS DIVISION

CLOSURE REPORT REQUIREMENTS

A closure report shall be submitted to the County of Los Angeles Department of Public Works, Environmental Programs Division, P.O. Box 1460, Alhambra, California 91802-1460, containing:

1. File number of facility and closure permit number.

2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.

3. Description of methods for obtaining, handling, and transporting samples.

4. Time and date samples were obtained.

5. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain-of-custody, and groundwater location) for UST closure shall be certified by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils. The certification must clearly state that all work was performed under the supervision of the person signing.

6. Chain-of-custody documentation initiated by person obtaining sample through person at CAL/EPA Department of Toxic Substance Control certified laboratory.

7. Disposal destination of tanks and evidence of legal disposal.

8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction, and methods of analysis.

9. Documentation as to depth of groundwater at facility.

10. Manifests to document hazardous waste disposal of any removed soil and tank rinsate.

11. Evidence of legal disposal of soils designated as nonhazardous.

12. Any observations of site contamination.

13. Remedial action plan to mitigate contamination.

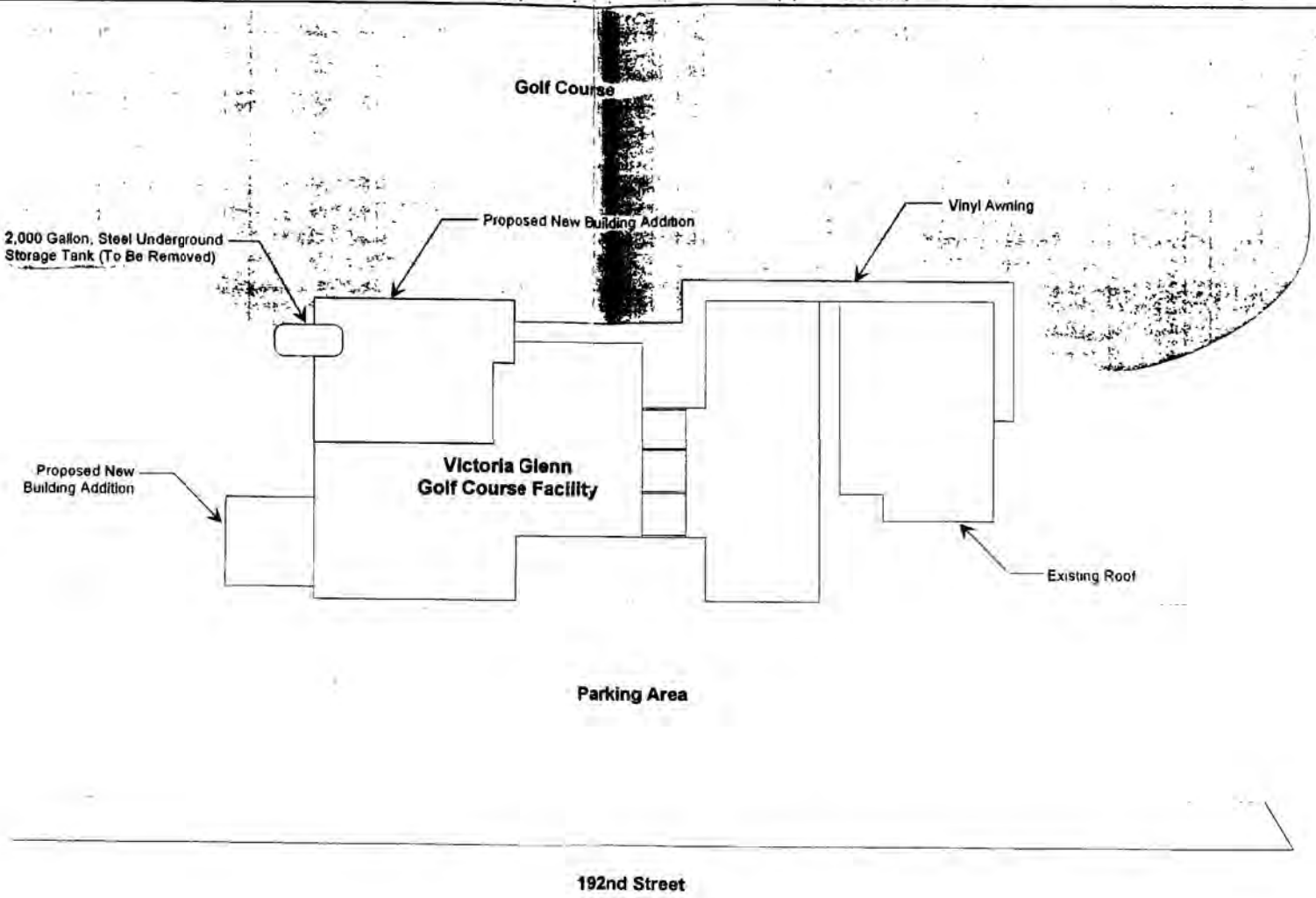
14. Report to be signed by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils.

Print Name Jason Nevath

Signature [signature] Date 2-22-01

UST1/CRR 01/13/97

FN 010001-036123 (22) A311167-doc



GEOKinetics
Geotechnical & Environmental Engineers

Project Name: Victoria Golf Course

Project No.: 1199-H

Date: February 2001

Site Plan

L.A. COUNTY DPW | HAZARDOUS MATERIALS SYSTEM | REPORT: PWR050.002

DATE COMPILED: 06/25/99 | TANKS INSPECTION JOB ORDER | INSP#: I000313202

RUN DATE: 03/28/01 11:24:18 | CLOSURE BY REMOVAL | ASSC#: A000311167

PAGE: 1

FILE #: 010001-036123 NAME: VICTORIA GOLF COURSE
ADD: 340 E 192ND ST
CARSON, CA 90746 AREA: 22 SMD: 95
XSTREET: AVALON BLVD THOMAS GUIDE: 0069-B2
CONTACT: DURON, STEVE TEL: 626 921 4606

PROC: CLOSURE SAMPLE REQUIRED? N SAMPLE #: _____

INSP INFO: 03-01-01 1:30PM REMOVE 1 2K GAS DESTINATION UNK CONTRACTOR GEO KINETIC BOB MCNEILL 949-412-0880

PERM TYPE: T 1 .. TANK INTERIM PERMIT # OF TANKS: 1 STATUS: PERMITTED

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	36		02/22/04
SAMPLE			
SELF-MONITOR			

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

TANK #	OWNER TANK ID #	CAPACITY (GAL)	CONTENTS
002	1	1,000	UNKNOWN

CON: UNKNOWN LDS: UNKNOWN

==========

RESULTS: No field inspection made

REMARKS: _____

INSPECTOR: L. McB INSPECTION DATE: 5-4-01

DISP: _____

L.A. COUNTY DPW
DATE COMPILED: 06/25/99
RUN DATE: 01/31/02 20:43:09

HAZARDOUS MATERIALS SYSTEM
TANKS INSPECTION JOB ORDER
SCHEDULED INSPECTIONS

REPORT: PWB150.002
INSP#: I000338600
ASSC#: P000311166
PAGE: 1

FILE #: 010001-036123 NAME: VICTORIA GOLF COURSE
ADD: 340 E 192ND ST
CARSON, CA 90746 AREA: 22 SMD: 95
XSTREET: AVALON BLVD THOMAS GUIDE: 0764-D3
CONTACT: DURON, STEVE TEL: 626 921 4606

PROC: SAMPLE REQUIRED? N

INSP INFO: _____

PERM TYPE: T 1 TANK INTERIM PERMIT # OF TANKS: 1 STATUS: PERMITTED

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	12		02/22/02
SAMPLE			
SELF-MONITOR			

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

TANK #	OWNER TANK ID #	CAPACITY (GAL)	CONTENTS
002	1	1,000	UNKNOWN
CON: UNKNOWN			LDS: UNKNOWN

RESULTS: Tank removed 12-17-97 (1000gal)
2K tank found and permitted 2-21-01
Tank removed 3-1-01 by GEOKINETIC
BOB MCNEIL (949) 412-0880

REMARKS: _____

INSPECTOR: Edward Calleros INSPECTION DATE: 2-11-01

DISP: BNLK / comp

CUPB 10001-36123

Smith, Tim

From: Smith, Tim
Sent: Tuesday, April 16, 2002 4:14 PM
To: 'Anna Tran'
Subject: RE: 340 E 192ND ST, CARSON CA 90746

Anna

1 tank was removed on 03/13/01 (closure report submitted today). Parks & Rec owes no FY01/02 fees. Waive the $544.00.

Tim

-----Original Message-----
From: Anna Tran [mailto:ATran@lacofd.org]
Sent: Monday, April 15, 2002 11:06 AM
To: Smith, Tim
Subject: 340 E 192ND ST CARSON CA 90746

PA ID # 311166 ACCT# P101184

Customer claimed tanks were removed. Would like to veriy UST Fees of $544.00 FY 01/02.

PERMIT APPLICATION SUPPLEMENT/NOTICE TO FILE
AUTHORIZATION TO MAINTAIN HAZARDOUS MATERIALS UNDERGROUND STORAGE TANKS
UNDER THE LOS ANGELES COUNTY UNIFIED PROGRAMS PERMIT

DUE DATE: 2/21/01

A 311165

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
Environmental Programs Division
900 South Fremont Avenue
Alhambra, CA 91803-1331
(626) 458-3517

RECEIVED
FEB 22 2001
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

DPW USE ONLY
FILE # 010001-036123
PERMIT # 311166
R/C CODE 22
SIC CODE
STATE ID #
TGP TGC

This form must accompany each tank permit application, or Unified Program Consolidated Form (UPCF) application to operate underground storage tanks
*** See instructions on back of this form***

IF THERE ARE NO UNDERGROUND TANKS AT THIS FACILITY, GO TO PARTS F & G.

A OWNER INFORMATION

B

Victoria Golf Course
OWNER/FACILITY NAME

340 E. 192nd Street
MAILING ADDRESS

Carson CA 90746
CITY STATE ZIP

FACILITY ADDRESS

Application is hereby made for authorization to operate and maintain underground storage tanks within the Los Angeles County Unified Hazardous Materials Program jurisdiction.

NEW PERMIT APPLICATION ONLY
Number of tanks at facility 1
Federal Tax ID number municipal
SIC Code

C Assessor parcel identification (obtain from property tax bill):

Map Book Number _____ Page Number _____ Parcel Number _____

D This supplement must be accompanied by:
(1) One copy of State Form "A", or UPCF - Tanks Page 1 facility/site information, for each site.
(2) One copy of State Form "B", or UPCF - Tanks Page 2 tank permit application information, for each tank
(3) Certificate of Financial Responsibility
(4) Hazardous Materials Underground Storage application fee (Complete Part E).

E Underground Storage Permit (**HMUSP**) fee schedule:

NUMBER OF TANKS:	HMUSP (APPLICATION FEE)
1	$41 00 ✓
2	$48 00
3	$55 00
4	$62 00
5	$69 00
6 or more tanks	$34 00 + $7 00 per tank = $

MAKE CHECKS PAYABLE TO: "LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORK"

Your annual permit maintenance fee, pro-rated quarterly through the next June 30th, plus a State service charge will be billed by the Los Angeles County Fire Department. All fees due must be paid prior to issuance of the Unified Program Permit authorizing the underground storage of hazardous materials

F Facilities claiming an exemption to regulation must complete this section:

☐ There are not underground storage tanks within this facility.

☐ Final interceptor(s) regulated under industrial waste Permit No _____

☐ Underground containers within this facility are used only for emergency spill containment for above ground storage tanks

☐ Other (attach a written statement)

G Tank owner/operator representative must complete this section (see back of form)

Signature _____ Title Director of Development

Print Name Christopher Hamill Date 2/21/01

Complete Certification of Compliance with Los Angeles County Lobbyist Ordinance on back. 39-0012 DPW Rev. 7/00

INSTRUCTIONS

Hazardous Materials Underground Storage Permit (**HMUSP**), or Unified Program Consolidated Form (UPCF) Application Supplement

Do not use this form for closure, transfer, or renewal of an existing HMUSP, new construction plan check, to add an unregistered tank to an existing HMUSP, or an additional approval.

A Facility name, mailing address and facility address on new permit applications must correspond with information on Part 1 of the State Form "**A**", or UPCF - Tanks Page 1, Facility/Site information. Please correct mailing label information if affixed.

B This application supplement is to be used for application to operate and maintain existing tanks located within the jurisdiction of the Los Angeles County Unified Hazardous Materials Program and Department of Public Works. Facilities located within the corporate limits of the cities of Burbank, Glendale, El Segundo, Long Beach, Los Angeles, Pasadena, San Fernando, Santa Fe Springs, Santa Monica, Signal Hill, Torrance, and Vernon should contact the respective local agencies directly for permit information Specify the number of tanks at the facility, Federal Tax ID number and primary business SIC Code.

C Assessor parcel identification is required for new permit applications only.

D The applicant is responsible for completing all information requested on State Forms "**A**" and "**B**", or UPCF - Tanks Page 1 & 2. The Department of Public Works Underground Tank inspector will not fill out these forms for you. This application is due by the date indicated.

E The fees to accompany this application represent the **HMUSP** application fee, only The first annual **HMUSP** maintenance fee plus the State service charge will be billed by the Los Angeles County Fire Department prior to the issuance of the Unified Program Permit. Future annual **HMUSP maintenance fees** will be payable upon billing by the Fire Department. Additional fees will be charged for any unregistered Underground Storage Tank(s).

F Persons that have been notified to file for a HMUSP and do not store any hazardous materials underground should check the appropriate box and return this form to avoid any unnecessary follow-up mailings.

The storage of hazardous waste in an underground tank where the specific tank is named in hazardous waste facility permit issued by the California Department of Health services is not subject to the HMUSP requirements. Owners of such facilities must furnish a copy of the State permit for facilities where this exclusion is requested.

Final interceptors in industrial waste pretreatment systems, catch basins, refinery pipelines, lagoons, storm drains, oil field gathering lines, well cellars, above ground storage tank spill containment, unlined pits or sumps, and piping not directly associated with a permitted facility are not subject to a **HMUSP**. Claims for exemption are subject to verification.

G This **HMUSP** application supplement and each State Form "**A**" or "**B**", or UPCF - Tanks Page 1 & 2, must be signed by the **Owner or Operator** of the Unified Program Facility on which the tank is located as follows:

1) A principal executive officer at the level of vice-president or by an authorized representative. The representative must be responsible for the overall operation of the facility where the tanks(s) are located.

2) A general partner proprietor.

3) A principal executive officer, ranking elected official, or authorized representative of a public agency.

4) A responsible business representative for persons filing under section (**F**) only.

CERTIFICATION OF COMPLIANCE WITH LOS ANGELES COUNTY LOBBYIST ORDINANCE

This is to certify that I, as permit applicant, for the project located at _____
LOCATION ADDRESS

am familiar with the requirements of Los Angeles County Code Chapter 2.160 et seq., (relating to the Los Angeles County Lobbyist Ordinance) and all persons acting on behalf of myself have complied and will continue to comply therewith through the application process.

APPLICANT (PRINT NAME)	APPLICANT SIGNATURE
COMPANY NAME (If employed by an entity/agency)	DATE

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM: [X] 1 NEW PERMIT [ ] 2 INTERIM PERMIT [ ] 3 RENEWAL PERMIT [ ] 4 AMENDED PERMIT [ ] 5 CHANGE OF INFORMATION [ ] 6 TEMPORARY SITE CLOSURE [ ] 7 PERMANENTLY CLOSED SITE

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME	NAME OF OPERATOR	
Victoria Golf Course	Arnold Palmer Golf Management	
ADDRESS	NEAREST CROSS STREET	PARCEL # (OPTIONAL)
340 E. 192nd Street	Avalon Blvd.	
CITY NAME	STATE / ZIP CODE	SITE PHONE # WITH AREA CODE
Carson	CA 90746	310-323-4174

✓ BOX TO INDICATE: [ ] CORPORATION [ ] INDIVIDUAL [ ] PARTNERSHIP [ ] LOCAL-AGENCY DISTRICTS [X] COUNTY-AGENCY * [ ] STATE-AGENCY * [ ] FEDERAL-AGENCY *

* If owner of UST is a public agency, complete the following: name of supervisor of division, section or office which operates the UST: Steve Duron

TYPE OF BUSINESS	✓ IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE	E. P. A. I. D. # (optional)
[ ] 1 GAS STATION [ ] 2 DISTRIBUTOR [ ] 3 FARM [ ] 4 PROCESSOR [X] 5 OTHER	[ ]		

EMERGENCY CONTACT PERSON (PRIMARY)		EMERGENCY CONTACT PERSON (SECONDARY) - optional	
DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
Steve Duron	626-821-4606		
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME	CARE OF ADDRESS INFORMATION		
County of Los Angeles - Parks/Rec.	Steve Duron		
MAILING OR STREET ADDRESS	✓ box to indicate: [ ] INDIVIDUAL [ ] LOCAL-AGENCY [ ] STATE-AGENCY		
301 N. Baldwin Ave.	[ ] CORPORATION [ ] PARTNERSHIP [X] COUNTY-AGENCY [ ] FEDERAL-AGENCY		
CITY NAME	STATE	ZIP CODE	PHONE # WITH AREA CODE
Arcadia	CA	91007	626-821-4606

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER	CARE OF ADDRESS INFORMATION		
Same as property owner			
MAILING OR STREET ADDRESS	✓ box to indicate: [ ] INDIVIDUAL [ ] LOCAL-AGENCY [ ] STATE-AGENCY		
	[ ] CORPORATION [ ] PARTNERSHIP [ ] COUNTY-AGENCY [ ] FEDERAL-AGENCY		
CITY NAME	STATE	ZIP CODE	PHONE # WITH AREA CODE

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 44- [ ][ ][ ][ ][ ][ ] unknown

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) – IDENTIFY THE METHOD(S) USED

✓ box to indicate: [ ] 1 SELF-INSURED [ ] 2 GUARANTEE [ ] 3 INSURANCE [ ] 4 SURETY BOND [ ] 5 LETTER OF CREDIT [ ] 6 EXEMPTION [ ] 7 STATE FUND [ ] 8 STATE FUND & CHIEF FINANCIAL OFFICER LETTER [ ] 9 STATE FUND & CERTIFICATE OF DEPOSIT [X] 10 LOCAL GOVT MECHANISM [ ] 99 OTHER

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I [ ] II [X] III [ ]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	TANK OWNER'S TITLE	DATE MONTH/DAY/YEAR
Christopher Ham II for owner.	Director of Development	2/21/01

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	FACILITY #
[ ][ ]	[ ][ ][ ] 010001	-36123

LOCATION CODE - OPTIONAL	CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL
22		

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

FORM A (6-95)

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM: [X] 1 NEW PERMIT [ ] 2 INTERIM PERMIT [ ] 3 RENEWAL PERMIT [ ] 4 AMENDED PERMIT [ ] 5 CHANGE OF INFORMATION [ ] 6 TEMPORARY TANK CLOSURE [ ] 7 PERMANENTLY CLOSED ON SITE [ ] 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: Victoria Golf Course

I. TANK DESCRIPTION
COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown	B. MANUFACTURED BY Unknown
C. DATE INSTALLED (MO/DAY/YEAR) unknown	D. TANK CAPACITY IN GALLONS: Unknown

II. TANK CONTENTS
IF A-1 IS MARKED, COMPLETE ITEM C.

A. [ ] 1 MOTOR VEHICLE FUEL [ ] 2 PETROLEUM [ ] 3 CHEMICAL PRODUCT [ ] 4 OIL [ ] 80 EMPTY [X] 95 UNKNOWN

B. [ ] 1 PRODUCT [ ] 2 WASTE

C. [ ] 1a REGULAR UNLEADED [ ] 1b PREMIUM UNLEADED [ ] 1c MIDGRADE UNLEADED [ ] 2 LEADED [ ] 3 DIESEL [ ] 4 GASAHOL [ ] 5 JET FUEL [ ] 6 AVIATION GAS [ ] 7 METHANOL [ ] 8 M85 [ ] 99 OTHER (DESCRIBE IN ITEM D BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. #

III. TANK CONSTRUCTION
MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: [ ] 1 DOUBLE WALL [ ] 2 SINGLE WALL [ ] 3 SINGLE WALL WITH EXTERIOR LINER [ ] 4 SINGLE WALL IN A VAULT [ ] 5 INTERNAL BLADDER SYSTEM [X] 95 UNKNOWN [ ] 99 OTHER

B. TANK MATERIAL (Primary Tank): [ ] 1 BARE STEEL [ ] 2 STAINLESS STEEL [ ] 3 FIBERGLASS [ ] 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC [ ] 5 CONCRETE [ ] 6 POLYVINYL CHLORIDE [ ] 7 ALUMINUM [ ] 8 100% METHANOL COMPATIBLE W/FRP [ ] 9 BRONZE [ ] 10 GALVANIZED STEEL [X] 95 UNKNOWN [ ] 99 OTHER

C. INTERIOR LINING OR COATING: [ ] 1 RUBBER LINED [ ] 2 ALKYD LINING [ ] 3 EPOXY LINING [ ] 4 PHENOLIC LINING [ ] 5 GLASS LINING [ ] 6 UNLINED [X] 95 UNKNOWN [ ] 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: [ ] 1 POLYETHYLENE WRAP [ ] 2 COATING [ ] 3 VINYL WRAP [ ] 4 FIBERGLASS REINFORCED PLASTIC [ ] 5 CATHODIC PROTECTION [ ] 91 NONE [X] 95 UNKNOWN [ ] 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) ___ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) ___
DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION
CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A U 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A (U) 99 OTHER Unknown

B. CONSTRUCTION: A U 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A (U) 95 UNKNOWN A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A U 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W/ COATING A U 8 100% METHANOL COMPATIBLE W/FRP A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A (U) 95 UNKNOWN A U 99 OTHER ___

D. LEAK DETECTION: [ ] 1 MECHANICAL LINE LEAK DETECTOR [ ] 2 LINE TIGHTNESS TESTING [ ] 3 CONTINUOUS INTERSTITIAL MONITORING [ ] 4 ELECTRONIC LINE LEAK DETECTOR [ ] 5 AUTOMATIC PUMP SHUTDOWN [X] 99 OTHER unknown

V. TANK LEAK DETECTION

[ ] 1 VISUAL CHECK [ ] 2 MANUAL INVENTORY RECONCILIATION [ ] 3 VADOZE MONITORING [ ] 4 AUTOMATIC TANK GAUGING [ ] 5 GROUND WATER MONITORING [ ] 6 ANNUAL TANK TESTING [ ] 7 CONTINUOUS INTERSTITIAL MONITORING [ ] 8 SIR [ ] 9 WEEKLY MANUAL TANK GAUGING [ ] 10 MONTHLY TANK TESTING [X] 95 UNKNOWN [ ] 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)	2 ESTIMATED QUANTITY OF SUBSTANCE REMAINING	3 WAS TANK FILLED WITH INERT MATERIAL?
Unknown "before 1950" *	0 GALLONS	YES [ ] NO [X]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	DATE
Christopher Hamill	2/21/01

LOCAL AGENCY USE ONLY
THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
		-11000/	-3611/23	

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

010001-009857
L-211738

JOA
SIIR

EPD

February 20, 1998

Mr. David Esfandi
Los Angeles County Department of Public Works
900 S. Fremont Avenue
Alhambra, CA 91803-1331

Subject: UST closure permit # 203039
Victoria Golf Course - 340 E. 192nd Street

Mr. Esfandi:

We are in receipt of your review letter for the above referenced property and wanted to provide you with further information on this site for your consideration.

1. We have included a copy of the hazardous waste disposal manifest signed by the receiving facility. A transporter's copy of the manifest was inadvertently included in the report sent to you.

2. Victoria Golf Course, as you may know, was constructed over a municipal landfill that operated for approximately 30 years in the immediate area. I have personal experience working on the Dominguez Golf Course, which is located approximately one mile south of Victoria, and was also constructed over a landfill. Our site assessment work at Dominguez indicated that the landfill waste was present at approximately 15 feet below grade, and we were unable to collect samples because of the paper, wire and rubber debris present at that site. We strongly believe we will encounter the same situation at Victoria, which makes a competent site assessment very difficult.

3. The soil sample collected from the bottom of the excavation at Victoria Golf Course indicated the following hydrocarbon levels:

Sample #	Sample location - depth	TPH gas EPA 8015g	B/T/E/X/MTBE EPA 8020
T-1	Middle of tank excavation - 11'	249	ND/1 641/5 784/14 632/ND

Of particular interest is that no evidence of benzene or MTBE was identified in the sample, and no evidence of those compounds was identified in the other samples collected from the excavation. We believe the above sample strongly indicates that only trace levels of hydrocarbons remain at the bottom of the excavation.

4. The depth to groundwater in the area is approximately 25 to 30 feet. That water, however, is overlaid by the landfill waste that was disposed in the area before Victoria Golf Course was constructed. We believe the potential threat of the small volume of lightly contaminated soil to groundwater in the area is insignificant when compared to the toxic potential of the landfill itself.

C-212752

Please understand that the above comments are meant to highlight the unique setting of the Victoria Golf Course, and not to undermine the validity of your comments. We believe that closure of the Victoria case warrants extra consideration because of it's unusual setting and the significant limitations on site assessment sampling imposed by the landfill material.

Sincerely,

Harrison/Roberts Environmental Management

Robert Blankenship, B.A., R.E.A.
Project Manager

L.A. COUNTY DPW — HAZARDOUS MATERIALS SYSTEM — REPORT: HMR050.002

DATE COMPILED: 05/25/93 — TANKS INSPECTION JOB ORDER — INSP#: I000207257

RUN DATE: 12/11/97 15:34:02 — CLOSURE BY REMOVAL — ASSC#: A000203039

PAGE: 1

FILE #: 010001-009857 NAME: LA CO VICTORIA GOLF COURSE
ADD: 340 E 192ND ST
CARSON, CA 90746 AREA: 22 SMD: 95
XSTREET: AVALON BLVD THOMAS GUIDE: 0069-B2
CONTACT: TOM LEVIN, SUPT TEL: 310 532 7690

PROC: CLOSURE SAMPLE REQUIRED? N SAMPLE #: _____

INSP INFO: 12-17-97 1PM 1/1K GS. DEST. ADAMS STEEL
HARRISON/ROBERTS BOB BLANKENSHIP 562/795-0088

PERM TYPE: T 0 TANK OPERATING PERMIT # OF TANKS: 1 STATUS: PERMITTED

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	36	06/19/96	06/02/98
SAMPLE	00		
SELF-MONITOR			

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

TANK #	OWNER TANK ID #	CAPACITY (GAL)	CONTENTS
001	01	1,000	REGULAR UNLEADED GASOLINE

CON: SINGLE WALLED LDS: MANUAL INVENTORY RECONCILIATIO

==========

RESULTS: Tank removed with piping and dispenser. Had possible soil contamination. Site not ready at time of inspection.

REMARKS: 2 hr.

INSPECTOR: R. McR. INSPECTION DATE: 12-17-97

DISP: EK

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 9, 1998

Mr. Tom Levin
Los Angeles County
Department of Parks and Recreation
433 S. Vermont Ave
Los Angeles, ca 90020

IN REPLY PLEASE
REFER TO FILE EP-1

010001-009857

Dear Mr. Levin:

HAZARDOUS MATERIAL UNDERGROUND STORAGE
CLOSURE/SITE ASSESSMENT REPORT
CLOSURE PERMIT NUMBER 203039
FACILITY LOCATION: 340 E 192nd ST., Carson (22)

This office has reviewed the closure report dated January 2, 1998 for the subject facility.

In order to better evaluate the report, the information indicated on the enclosed Additional Closure Requirements sheet must be submitted to this office by March 31, 1998.

If you have any questions regarding this matter, please contact Mr. David Esfandi of this office at (626) 458-3510, Monday through Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

HARRY W. STONE
Director of Public Works

By M.D. Esfandi
Environmental Programs Division

UST1/CL207 Rev. 6/97

c- 209598

Enc.

cc: Mr. Robin chang, Harrison / Roberts Environmental Management

ADDITIONAL CLOSURE REQUIREMENTS

The additional information or requirements checked below must be submitted to the Los Angeles County Department of Public Works, Environmental Programs Division, P.O. Box 1460, Alhambra, CA 91802-1460, in order to complete evaluation of Closure Permit No. 203039.

[ ] Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.

[ ] Insufficient number of samples were obtained. Additional samples required in accordance with attached Closure Permit Requirements.

[ ] Describe method of obtaining, handling, and/or transporting samples.

[ ] Indicate time and date samples were obtained.

[ ] Submit logs certified by a CA registered geologist, CA certified engineering geologist, or CA registered civil engineer with sufficient experience in soils for all borings.

[ ] Submit chain-of-custody documentation initiated by person obtaining sample through person at Department of Health Services certified laboratory.

[ ] Disposal destination of tanks and evidence of legal disposal.

[ ] Analysis results by a State certified laboratory shall be submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.

[X] Documentation as to depth of groundwater at facility.

[X] Manifests to document hazardous waste disposal of removed soil/tank rinsate with the signature of the disposal facility owner/operator.

[ ] Evidence of legal disposal of soils designated as nonhazardous.

[ ] Signature on the report is required of CA registered geologist, CA certified engineering geologist, or CA registered civil engineer with sufficient experience in soils. The report must clearly indicate that all soil sampling was done under the supervision of the registered professional.

[X] Define the vertical and lateral extent of contamination.

[X] Propose a remedial action plan to mitigate contamination.

[X] Proposed future uses or improvements for the area related to the contamination.

[X] Other: Your proposal to leave the contamination in place can not be evaluated untill such time that the extent of the contamination has been fully defined

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO
P O BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 9th, 1998

Mr. Tom Levin
Los Angeles County
Department of Parks and Recreation
433 S. Vermont Ave
Los Angeles, ca 90020

IN REPLY PLEASE
REFER TO FILE EP-1

010001-009857

Dear Mr. Levin:

HAZARDOUS MATERIAL UNDERGROUND STORAGE
CLOSURE/SITE ASSESSMENT REPORT
CLOSURE PERMIT NUMBER 203039
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Very truly yours,

HARRY W. STONE
Director of Public Works

By M. D. Esfandi
Environmental Programs Division

UST1/CL207 Rev. 6/97

c- 209598

Enc.

cc: Mr. Robin chang, Harrison / Roberts Environmental Management

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[ ] Indicate time and date samples were obtained.

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[ ] Submit chain-of-custody documentation initiated by person obtaining sample through person at Department of Health Services certified laboratory.

[ ] Disposal destination of tanks and evidence of legal disposal.

[ ] Analysis results by a State certified laboratory shall be submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.

[X] Documentation as to depth of groundwater at facility.

[X] Manifests to document hazardous waste disposal of removed soil/tank rinsate with the signature of the disposal facility owner/operator.

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[X] Define the vertical and lateral extent of contamination.

[X] Propose a remedial action plan to mitigate contamination.

[X] Proposed future uses or improvements for the area related to the contamination.

[X] Other: Your proposal to leave the contamination in place can not be evaluated untill such time that the extent of the contamination has been fully defined

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

INDUSTRIAL WASTE/HAZARDOUS MATERIALS UNDERGROUND STORAGE
CLOSURE INSPECTION REPORT

Date 12-17-92

Facility Name L.A. Co - Victoria Golf File No. I- 9857 -22

Site Address 340 E. 192 ST., Carson Permit No. A 203039

Contact Person Tom Levin Phone (310) 532-7690

Type Inspection: [X] Tank(s) & Piping [ ] Sump(s)
[ ] Tank(s) only [ ] Closure in place
[ ] Piping only [ ] Other

Contractor Harrison/Robert - Robert Blankenship Phone (562) 795-0088

Samples by Harrison/Robert - R. Blankenship Phone (562) 795-0088

Geologist — Phone ( )

Industrial Hygienist — Phone ( )

Items closed:

Type (tank/sump)	Contents	Capacity	Proper Sampling [yes]	Proper Sampling [no]	Perm Removal	Perm In-place
1. Tank	Reg. Gas	1,000 gal	[X]	[ ]	[X]	[ ]
2.			[ ]	[ ]	[ ]	[ ]
3.			[ ]	[ ]	[ ]	[ ]
4.			[ ]	[ ]	[ ]	[ ]

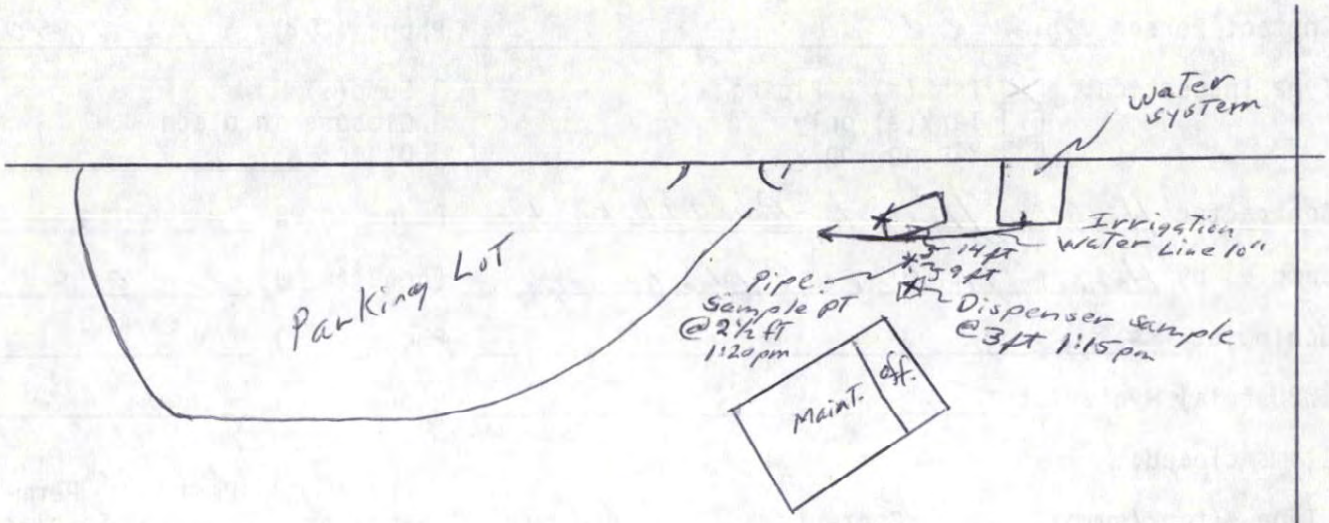
Observations:	[yes]	[no]	
Visual contamination observed	[X]	[ ]	
Sampling of excavated soil required	[X]	[ ]	
Tanks structurally sound	[ ]	[X]	
Tanks remaining on site	[ ]	[X]	How many — Monitor sys. —
Sampling conducted by DPW	[ ]	[X]	Attach Chain-of-Custody
Notice issued	[ ]	[X]	Attach copy of Notice

Comments: The soil had a odor of possible contamination also the pit had product in the bottom. A 10" water main pipe was broken during excavation. The tank had 50# & 25# holes on the S. end. Tank was on cement pad.

Include a detailed site survey on the reverse of this form.

Inspector L. McDonald Date 12-17-92

38-0027 DPW 4/91


Water system
Irrigation water Line 10"
14 ft
9 ft
Pipe
Sample pt @2½ ft 1:20 pm
Dispenser sample @3 ft 1:15 pm
Parking Lot
Maint.
off.

Golf Course

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

Mr. Tom Levin, Superintendent
Los Angeles County
Victoria Golf Course
340 E. 192nd street
Carson, CA 90746

IN REPLY PLEASE
REFER TO FILE **EP-1**

010001-009857

Dear Mr. Levin:

HAZARDOUS MATERIALS UNDERGROUND STORAGE
CLOSURE CERTIFICATION
FACILITY LOCATION: 340 East 192nd Street, Carson
CLOSURE APPLICATION NUMBER 203039

This office has reviewed the final closure report dated February 20, 1998 required as a part of the subject closure permit. Based on the information submitted, we find that all closure requirements have been completed. With the provision that the information provided to this agency was accurate and representative of existing conditions, it is our position that no further action is required at this time.

Please be advised that this letter does not relieve you of any liability under the California Health and Safety Code or Water Code for past, present, or future operations at this site. Nor does it relieve you of the responsibility to clean up existing, additional, or previously unidentified conditions at the site which cause or threaten to cause pollution or nuisance or otherwise pose a threat to water quality or public health.

Additionally, be advised that changes in the present or proposed use of the site may require further site characterization and mitigation activity. It is the property owner's responsibility to notify this agency of any changes in report content, future contamination findings, or site usage.

If you have any questions regarding this matter, please contact John Awujo of this office at (626) 458-3507, Monday through Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

HARRY W. STONE
Director of Public Works

M. D. Espinoza

For CARL W. SJOBERG
Chief, Industrial Waste Planning & Control
Environmental Programs Division

UST1/CL205 REV. 6/97
C214061

cc: California Regional Water Quality Control Board
cc: Mr. Robert Blankership, Harrison / Roberts Environmental Management

Y PD

010001-009857
A-203039

RECEIVED
JAN 21 1998
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

IEO
CLSR

Report on Underground Storage Tank Closure

Compiled for:

Arnold Palmer Golf, Inc.
8640 E. Rush Street
Rosemead, CA 91770

Completed at:

Victoria Golf Course
340 E. 192nd Street
Carson, CA 90746

C-209598

Submitted for the review of:

The Los Angeles County Department of Public Works
Waste Management Division
900 S Fremont Avenue
Alhambra, CA 91803-1331

January 2, 1998

Harrison/Roberts Environmental Management
11140 Los Alamitos Blvd., Suite 203 Los Alamitos, CA 90720 (562) 795-0088 License #673178 A/Haz

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Exhibit #5: Laboratory Analysis Report, Chemical & Environmental Laboratories
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1.0 Underground Storage Tank Removal

This report is submitted for the closure of an underground storage tank removed from 340 E. 192nd Street in Carson, California.

Exhibit #1: Site Location Map

An underground storage tank (UST) closure permit was issued for DPW site file No. 10001-9857 for the removal of one (1) 1,000 gallon gasoline tank at this facility The tank removal project was completed on December 17, 1997.

Upon exposing the tank, the contents were pumped out by Nieto and Sons, Inc. That rinsate was transported to the Demenno/Kerdoon recycling facility under hazardous waste manifest #97250661. The tank was recycled to scrap metal at Adams Steel in Anaheim, California. The product piping from the tank to the dispenser was washed, cut, and removed from it's trench along with the dispenser.

Exhibit #2: Hazardous Waste Manifest # 97250661
Exhibit #3: Tank Disposal Forms, Adams Steel

2.0 Subsurface Conditions

Soils exposed by the excavation consisted of dark grey silty sand from existing grade to the bottom of the excavation, at approximately 11 feet below grade. No evidence of groundwater was encountered in the excavation at it's terminal depth.

3.0 Chemical Analysis of Soil Samples

Following the tank removal, soil samples were collected under the observation of Inspector Randall McDonald of the Los Angeles County Department of Public Works (DPW). All soil samples were collected by Robert Blankenship of Harrison/Roberts Environmental Management, working under the supervision of Dr. Robin Chang, California Registered Geologist #5333.

Sample T-1 was collected from below the bottom of the tank invert, at approximately 11 feet below existing grade. Sample P-1 was collected by hand augering beneath the product pipeline where it exited from beneath the building, at an approximate depth of three feet below grade. Soil sample D-1 was collected by hand augering beneath the dispenser, after it's removal, at an approximate depth of three feet below grade. Finally, sample SP-1 was collected from the stockpiled soil (spoils pile) excavated from the above the tank. That soil appeared to be contaminated with petroleum hydrocarbons and needed to be sampled prior to disposal.

After collection, the samples were immediately capped, labeled and placed in an ice chest cooled to approximately 4° centigrade. The samples were then transferred to Chemical & Environmental Laboratories, Inc., a State DOHS certified laboratory. Each of the samples was subjected to analysis by the State of California draft method for gasoline, and EPA Method 8020 for the presence of benzene, toluene, ethyl benzene, xylenes, and MTBE. The locations of the soil samples, and the analytical results of the chemical analyses, are summarized in tabular form below.

Sample #	Sample location - depth	TPH gas EPA 8015g	B/T/E/X/MTBE EPA 8020
SP-1	Spoils pile	20	ND/0 240/0 268/1 200/ND
T-1	Middle of tank excavation - 11'	249	ND/1 641/5.784/14.632/ND
D-1-3'	Beneath dispenser 3	ND	ND/ND/ND/ND/ND
P-1-3'	Beneath product piping - 3'	ND	ND/ND/ND/ND/ND

ND = Not detected at the reporting limit
All concentrations reported in units of mg/kg, or ppm.

Exhibit #4: Facility Configuration/Sample Locations, Harrison/Roberts
Exhibit #5: Laboratory Analysis Report, Chemical & Environmental Laboratories

Following the tank removal, the excavated soil from above the gasoline tank was manifested and transported to the TPS recycling facility in Adelanto, CA. A total of 40.82 tons of impacted soil was removed from the facility on December 18, 1997.

Exhibit #6: Non-Hazardous Waste Manifest, TPS Recycling

4.0 Observations & Conclusions

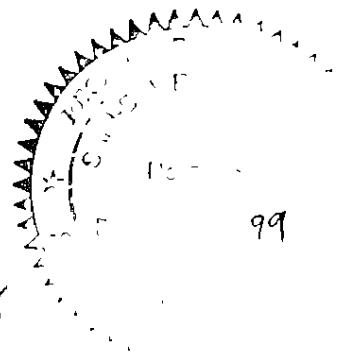
Following removal of the existing waste oil storage tank, the soil sample (T-1) collected from the bottom of the excavation indicated 249 ppm of total petroleum hydrocarbon as gasoline, however, no evidence of benzene or MTBE was detected in that sample Based on that finding, formal site closure is requested from the Los Angeles County Department of Public Works.

5.0 Limitations of Investigation

The sampling, analyses and conclusions contained in this report are based on site conditions as they existed at the time of sampling and further assume the excavation to be representative of the subsurface conditions throughout the area. The sampling and observations were performed using the degree of care and skill ordinarily exercised under similar circumstances by reputable Engineers and Geologists practicing in this, or similar locations. No other warranty, expressed or implied is made as to the conclusions and professional advice included in this report.

Respectfully submitted,

Harrison/Roberts Environmental Management

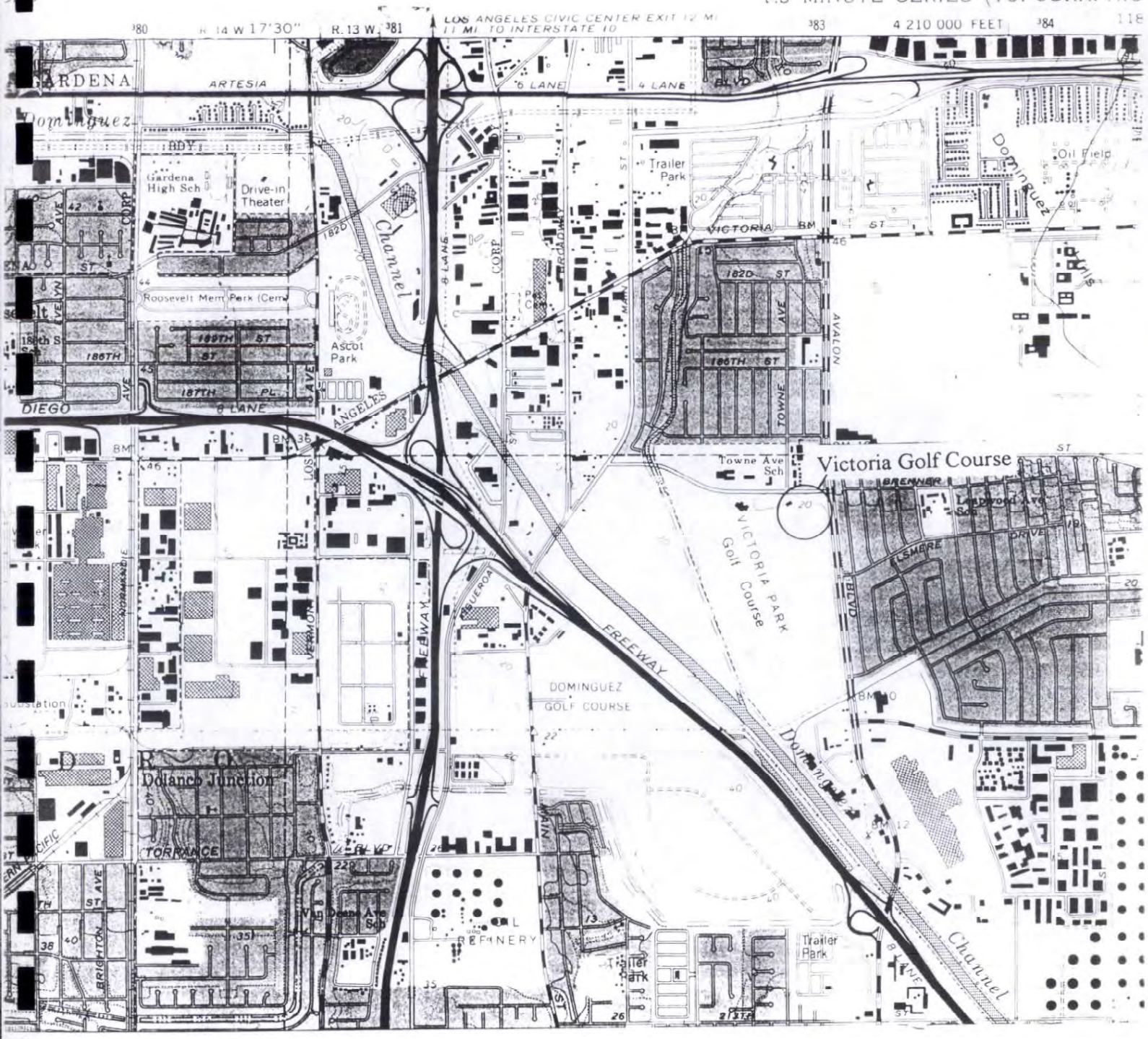


Robert Blankenship, B.A., R.E.A.
Project Manager

S. Robin Chang, Ph.D., R.G.
CA Registered Geologist #5333

Exhibit #1: Site Location Map

TORRANCE QUADRANGLE
CALIFORNIA—LOS ANGELES CO.
7.5 MINUTE SERIES (TOPOGRAPHIC



SCALE 1 24 000

MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 20 FEET

DOTTED LINES REPRESENT 5-FOOT CONTOURS

NATIONAL GEODETIC VERTICAL DATUM OF 1929

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOWER LOW WATER

THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER

THE MEAN RANGE OF TIDE IS APPROXIMATELY 4 FEET



QUADRANGLE LOCATION

Exhibit #2: Hazardous Waste Manifest # 97250661

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CAN981373665 — Manifest Document No.: 00001
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: VICTORIA GOLF COURSE, 340 E 192ND ST., CARSON CA.
4. Generator's Phone (310) 532-7690

A. State Manifest Document Number: 97250661
B. State Generator's ID:
C. State Transporter's ID:
D. Transporter's Phone: 714-990-6855
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: 310-537-7100

5. Transporter 1 Company Name: NIETO AND SONS TRUCKING, INC.
6. US EPA ID Number: CAT080016116
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address: DEMENNO KERDOON, 2000 N. ALAMEDA STREET, COMPTON, CA 90222
10. US EPA ID Number: CAT080013352

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA HAZARDOUS WASTE LIQUID	001	TT	0200	G	State 221; EPA/Other EXEMPT
b.					State; EPA/Other
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information

NO SMOKING
WEAR APPROPRIATE PROTECTIVE CLOTHING
EMERGENCY TELEPHONE # (714) 990-6855

alternate disposal sites: CROSBY & OVERTON, 1630 W. 17th STREET-(310)432-5445, LONG BEACH, CA 90813 CAD028409019

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
Robert Blankenship	[signature]	12 17 97

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
GILBERT GARCIA	Gilbert Garcia	12 17 97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

GENERATOR — TRANSPORTER — FACILITY

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (4/97)
EPA 8700—22

Yellow: GENERATOR RETAINS

IN CASE OF EMERGENCY OR SPILL, CALL INFORMATION RESPONSE CENTER 1-800-[illegible]-8801 WITHIN CALIFORNIA, CALL [illegible]-852[illegible]

97250661

Exhibit #3: Tank Disposal Forms, Adams Steel

CERTIFICATE OF
DESTRUCTION

COMPANY NAME Golf Course

ADDRESS 340 E 192 st
Carson

ADAMS STEEL CERTIFIES THAT N/K

HAS/HAVE BEEN SCRAPPED, CRUSHED AND TOTALLY
DESTROYED ON: 12-19-97

SIGNATURE Cheryl Hartman

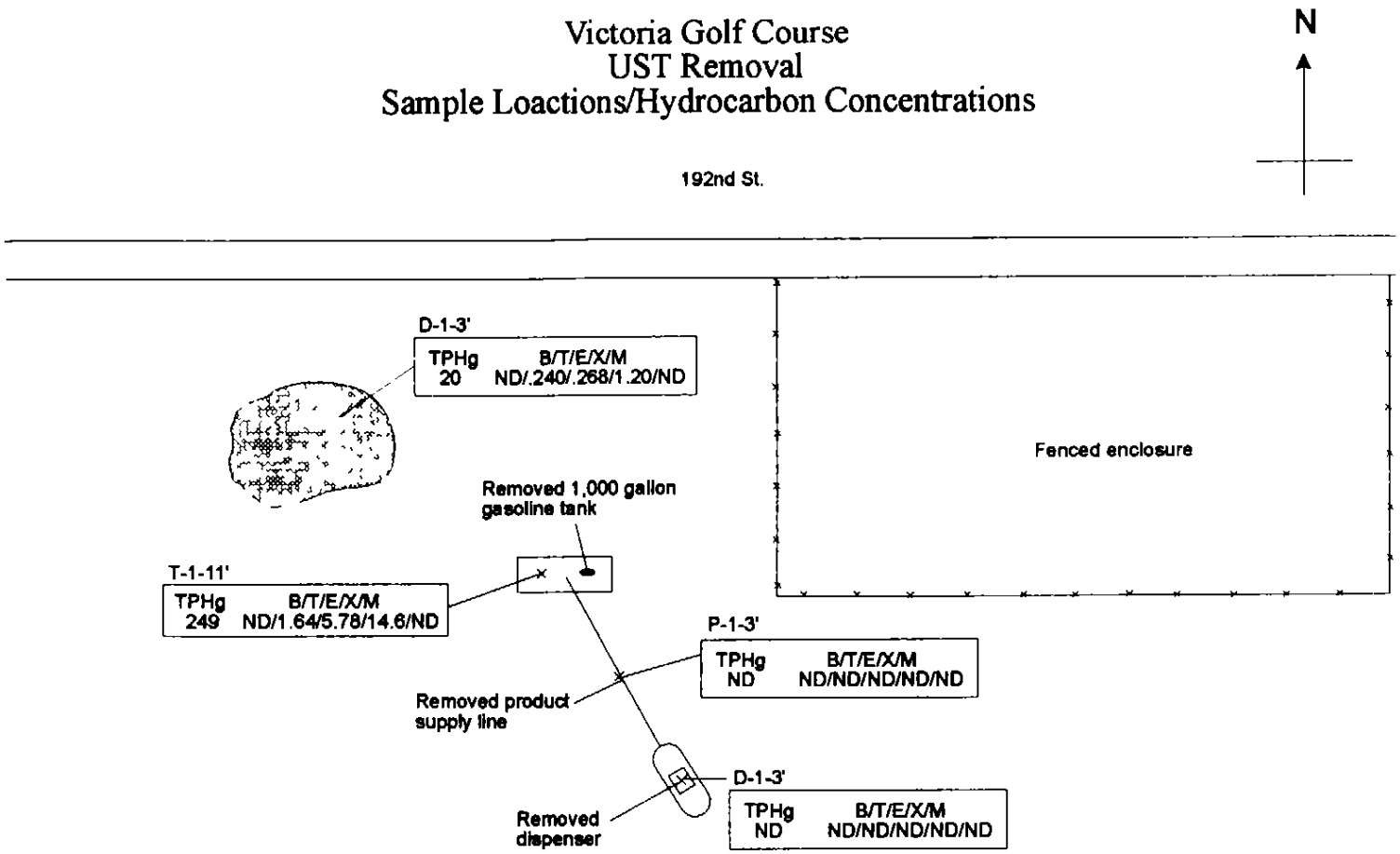
TITLE weigh master

DATE 12-19-97

Adams Steel
3200 E. Frontera Street
Anaheim, California 92806
(714) 630-6523
FAX (714) 630-5836

Exhibit #4: Facility Configuration /Sample Locations, Harrison/Roberts

Victoria Golf Course
UST Removal
Sample Loactions/Hydrocarbon Concentrations



Harrison/Roberts Environmental Management 11140 Los Alamitos Blvd. #203 Los Alamitos, CA 90720 (562) 795-0088	Site: Victoria Golf Course Address: 340 E. 192nd St. Carson, CA 90746 Project: UST Removal Date Sampled: December 17, 1997	Legend × = sample location 1 inch = 15 feet

Exhibit #5: Laboratory Analysis Report, Chemical & Environmental Laboratories

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

December 31, 1997 Certificate No.: 2268

Mr. Robert Blankenship
Harrison/Roberts Env Management
11140 Los Alamitos Blvd , Suite 203
Los Alamitos, CA 90720

Project: Victoria

Dear Mr. Blankenship:

Enclosed please find the report for the sample(s) received by Chemical & Environmental Laboratories and analyzed as indicated in the chain-of-custody attached.

We appreciate the opportunity to service the needs of your company. Please call me at (562) 921-8123 if you have any questions.

Sincerely,

Larry Zhang

Larry Zhang, Ph.D.
Laboratory Director

14148 E Firestone Blvd., Santa Fe Springs, CA 90670 Tel 562 921-8123, Fax 562 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

ANALYTICAL REPORT

---M8015(G)/8020(BTEX,MTBE)---

Client Name: Harrison/Roberts
Project Manager: Robert Blankenship
Project Name. Victoria

Date Sampled: 12/17/97
Date Analyzed: 12/17/97
Date Reported: 12/18/97

SAMPLE IDENTIFICATION		RESULT (mg/kg or ppm)					
C&E ID	Sample ID	M8015 Gasoline	M8020 Benzene	M8020 Toluene	M8020 Ethylbenzene	M8020 Xylenes	M8020 MTBE
71217G-1	SP-1	20	ND	0.240	0.268	1.200	ND
71217G-2	T-1	249	ND	1.641	5.784	14.632	ND
71217G-3	D-1-3'	ND	ND	ND	ND	ND	ND
71217G-4	P-1-3'	ND	ND	ND	ND	ND	ND
Detection Limit:		10	0.005	0.005	0.005	0 005	0.1

ND = Not detected at the indicated detection limit.

14148 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel 562 921-8123, Fax 562 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

QA/QC REPORT

--- M8015(G)/M8020 ---

I. Matrix Spike (MS)/Matrix Spike Duplicate(MSD)

Date Performed: 12/17/97
Batch #: 2604
Lab Sample I.D.: 71217G

Unit: mg/kg

ANALYTE	SPK CONC	MS (mg/kg)	MS %	MSD (mg/kg)	MSD %	RPD	ACP %MS	ACP RPD
Benzene	0.0200	0.0182	91	0.0192	96	5 3	80-120	20
Toluene	0.0200	0.0186	93	0.0195	98	4.7	80-120	20
Ethylbenzene	0.0200	0.0179	90	0.0188	94	4.9	80-120	20
Xylenes	0.0200	0.0183	92	0.0190	95	3.8	80-120	20
Gasoline	1	1.04	104	0.95	95	9.0	70-120	20

II. Laboratory Quality Control Check Sample

ANALYTE	SPK CONC	RESULT	%RECOVERY	ACP %
Benzene	0.0200	0.0187	94	80-120
Toluene	0.0200	0.0192	96	80-120
Ethylbenzene	0.0200	0.0197	99	80-120
Xylenes	0.0200	0.0194	97	80-120
Gasoline	1	0.89	89	80-120

14148 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 562 921-8123, Fax 562 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

71217G

CHAIN OF CUSTODY RECORD

№ 33695

Client: Harrison/Roberts Environ	Site Address:
Project No/Name: Victoria	
Project Manager: Bob Blankenship	Sampled By:
Tel: Fax:	Date 12-17-97 Page of

	SAMPLE ID	DATE	TIME	TYPE	CONTAINER TYPE	ANALYSES REQUIRED
1	SP-1	7-12-97		Soil		8015/8020/MTBE
2	T-1	↓		↓		↓
3	D-1-3'					
4	P-1-3'					

Remarks.

Relinquished By:	Date	Time	Received By:	Date	Time
Lidio Silva	7/17/97	14:00	[signature]	7-17-97	14:00
Relinquished By:	Date	Time	Received By:	Date	Time

14148 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 310 921-8123, Fax: 310 921-7974

Exhibit #6: Non-Hazardous Waste Manifest, TPS Recycling

Manifest

TPS Technologies Soil Recycling
Non-Hazardous Soils

Manifest #

Date of Shipment	Responsible for Payment:	Transporter Truck #:	Facility #	Given by TPS	Load #
12 - 18 - 97	Transporter	123-223	A 07	09917	001

Generator and/or Consultant

Generator's Name and Billing Address: VICTORIA GOLF COURSE, 340 EAST 192ND STREET, CARSON, CA 90746	Generator's Phone #:	Generator's US EPA ID No.
	Person to Contact:	
	FAX#:	Customer Account Number with TPS
Consultant's Name and Billing Address: HARRISON/ROBERTS ENVIRONMENTAL MANGT., 11140 LOS ALAMITOS BLVD., SUITE 203, LOS ALAMITOS, CA 90720	Consultant's Phone #: (562) 795-0088	
	Person to Contact: BOB BLANKENSHIP	
	FAX#:	Customer Account Number with TPS
Generation Site (Transport from): *(name & address)* VICTORIA GOLF COURSE, 340 EAST 192ND STREET, CARSON, CA 90746	Site Phone #: 310 532 7690	BTEX Levels
	Person to Contact: TOM LEVIN	TPH Levels
	FAX#:	AVG. Levels
Designated Facility (Transport to): *(name & address)* TPS Technologies Inc., 12328 Hibiscus Avenue, Adelanto, California 92301	Facility Phone #: (800) 862-8001	Facility Permit Numbers
	Person to Contact: Darren Bartlett	
	FAX#: (619) 246-8004	
Transporter Name and Mailing Address: W.A. Woods Industries, 10120 W. Frontage Rd., South Gate, CA 90280	Transporter's Phone #: (310) 927-1367	Transporter's US EPA ID No.:
	Person to Contact: Ron Benson	Transporter's DOT No.:
	FAX#: (310) 806-1857	Customer Account Number with TPS

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐			[illegible]	[illegible]	[illegible]
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					23.90

List any exception to items listed above: [illegible]

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Robert Blankenship — Generator ☐ Consultant ☒ — Signature and date: [signature] — Month 12 Day 18 Year 97

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: MARK [illegible] / Brian [illegible] — Signature and date: [signature] — Month 12 Day 18 Year 97

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: Darren R. Bartlett/Sandy Clements — Signature and date: [signature]

Please print or type.

TRANSPORTER'S COPY

Manifest

TPS Technologies Soil Recycling
Non-Hazardous Soils

Manifest #

Date of Shipment:	Responsible for Payment	Transporter Truck #:	Facility #	Given by TPS	Load #
12 - 18 - 97	Transporter	123-223	A [illegible]	09917	0 0 2

Generator and/or Consultant

Generator's Name and Billing Address:	Generator's Phone #:	Generator's US EPA ID No:
VICTORIA GOLF COURSE 340 EAST 192ND STREET CARSON, CA 90746	Person to Contact: FAX#:	Customer Account Number with TPS:
Consultant's Name and Billing Address	**Consultant's Phone #:**	
HARRISON/ROBERTS ENVIRONMENTAL MANGT. 11140 LOS ALAMITOS BLVD., SUITE 203 LOS ALAMITOS, CA 90720	(562) 795-0088 Person to Contact: BOB BLANKENSHIP FAX#:	Customer Account Number with TPS:
Generation Site (Transport from): *(name & address)*	**Site Phone #:**	BTEX Levels
VICTORIA GOLF COURSE 340 EAST 192ND STREET CARSON, CA 90746	(310) 532 7690 Person to Contact: TOM LEVIN FAX#: ( ) -	TPH Levels AVC Levels
Designated Facility (Transport to): *(name & address)*	**Facility Phone #:**	Facility Permit Numbers
TPS Technologies Inc. 12328 Hibiscus Avenue Adelanto, California 92301	(800) 862-8001 Person to Contact: Darren Bartlett FAX#: (619) 246-9004	
Transporter Name and Mailing Address:	**Transporter's Phone #:**	Transporter's US EPA ID No.:
W.H. Woods Industries 10120 W. Frontage Rd. South Gate, CA 90280	Person to Contact: FAX#: (310) 806-1857	Transporter's DOT No.: Customer Account Number with TPS

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐			[illegible]	3[illegible]	[illegible]
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					

List any exception to items listed above: [illegible]

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☐ Consultant ☐	Signature and date.	Month	Day	Year
TOM G. LEVIN	TOM G. LEVIN	12	19	97

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name:	Signature and date	Month	Day	Year
MARK FRY / JOHN GLYNN	[illegible]	12	15	97

Recycling Facility

Discrepancies

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name.	Signature and date.
Darren R. Bartlett/Sandy Clements	

Please print or type.

TRANSPORTER'S COPY

76L265

LOS ANGELES COUNTY LETTERGRAM

To: FILE From RVG Date 1.14.98

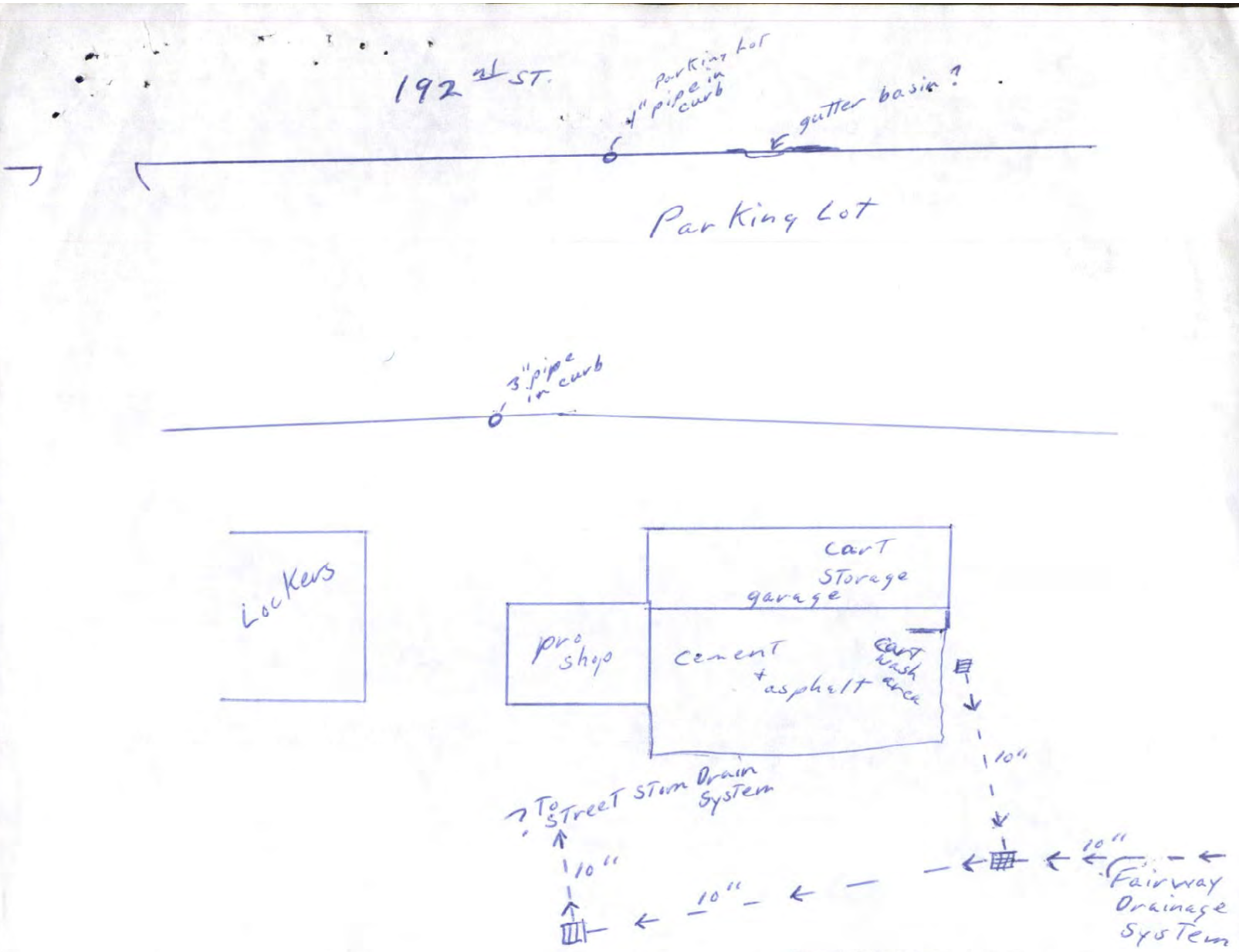
Subject LA CO VICTORIA GOLF COURSE / 340 E. 192ND ST / CARSON (22) No. 010001 - 009857

PER DISCUSSION WITH MR. J. BAIOCO WE WILL SEND A FOLLOW-UP SURVEY FOR THE INSP # 194360 TO ISSUE A NOTICE FOR THE ILLEGAL DISCHARGE. AND HE SAID THAT AS LONG AS THE WATER IS CONTAINED AT THE FACILITY NO ~~SE~~ INDW PERMIT WILL BE REQUIRED.

C383267



File: 01001-00985? Date: 8-4-97
By: R. McR. Time: 11:00 am
Co/DBA: Victoria Golf Course
Address: 340 E. 192 Street, Carson
Comments: Cart hosing area with drain Box.


192nd ST.
parking lot
4" pipe in curb
gutter basin?
Parking Lot
3" pipe in curb
Lockers
pro shop
cart storage garage
cement + asphalt
cart wash area
10"
To Street Storm Drain System
10"
10"
10"
Fairway Drainage System

0100001-009857 MDE/4LKF

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFTY CODE.
SIGNED [signature] DATE FEB 12 1998

REPORT DATE 04/25/98 CASE #

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: David Esfandi PHONE: (626) 458-3510 SIGNATURE: M.D. Esfandi
REPRESENTING ☒ LOCAL AGENCY ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ OTHER
COMPANY OR AGENCY NAME: LA Co. D.P.W.
ADDRESS: 900 S. Fremont Ave CITY Alhambra STATE CA ZIP 91803

RESPONSIBLE PARTY
NAME: LA Co. Dept of Parks & Rec. ☐ UNKNOWN CONTACT PERSON: Tom Levin PHONE: (310) 532-7440
ADDRESS: 433 S. Vermont Ave CITY Los Angeles STATE CA ZIP 90020

SITE LOCATION
FACILITY NAME (IF APPLICABLE): Victoria Park & Golf Course OPERATOR: Tom Levin PHONE: (310) 532-7640
ADDRESS: 340 E. 192nd. St. CITY Carson COUNTY LA ZIP 90746
CROSS STREET: Avalon Blvd.

IMPLEMENTING AGENCIES
LOCAL AGENCY: LA Co. D.P.W. AGENCY NAME CONTACT PERSON: Carl S Joberg PHONE: (626) 458-3539
REGIONAL BOARD: LA Region CONTACT PERSON: Jim Kuykendall PHONE: (213) 266-7632

SUBSTANCES INVOLVED
(1) TPH-2 249 ppm B/T/E/X/MTBE = ND/1.64/5.78/14.6/ND ppm NAME QUANTITY LOST (GALLONS) ☒ UNKNOWN
(2) ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED 04/20/98 HOW DISCOVERED ☐ TANK TEST ☐ INVENTORY CONTROL ☒ TANK REMOVAL ☐ SUBSURFACE MONITORING ☐ OTHER ☐ NUISANCE CONDITIONS
DATE DISCHARGE BEGAN ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE 12/07/97
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) ☐ REMOVE CONTENTS ☐ REPLACE TANK ☒ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE ☐ OTHER

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY: ☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY
☒ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ VACUUM EXTRACT (VE) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS)
☒ OTHER (OT) None was proposed

COMMENTS

HSC 05 (11/89)

L-21737

L-21738

L.A. COUNTY DPW | HAZARDOUS MATERIALS SYSTEM | REPORT: HMR050.001

DATE COMPILED: 05/25/93 | IW INSPECTION JOB ORDER | INSP#: I000194360

RUN DATE: 06/17/97 15:59:09 | SURVEY REQUEST | ASSC#:

PAGE: 1

FILE #: 010001-009857
ADD: 340 E 192ND ST
CARSON, CA 90746
XSTREET: AVALON BLVD
CONTACT: TOM LEVIN, SUPT

NAME: LA CO VICTORIA GOLF COURSE

AREA: 22 SMD: 95
THOMAS GUIDE: 0069-B2
TEL: 310 532 7690

PROC: SURVEY SAMPLE REQUIRED? N SAMPLE #: _____

INSP INFO: DETERMINE WHETHER FACILITY WILL BE REQUIRED TO OBTAIN AN INDUSTRIAL WASTE DISCHARGE PERMIT. PS ISSUE PROPER NOTICE TO IU.

(CART WASH)

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

==========

RESULTS: Golf carts are hosed off after each use - body and seat, also tires. This water goes to the surface asphalt and a storm drain box. The drain box is tied into the

REMARKS: golf course drainage system. Discharging To and unknown tie in point, possible To the street gutter system.

INSPECTOR: L. McDonald INSPECTION DATE: 8-4-97

DISP: _____

1-12-98 - Enclosed site Public Works Rd. maps showing STORM Drain System in Street and by Open channel Drain.

INSP# 209438

Tom Levin on VAC-

RVG

FOR HMS UPDATE ONLY
VIOLATION CORRECTION WORKSHEET

File 10001-009857

Date: 5-18-98

Industry: L.A. Co Victoria Golf Course

Location: 340 E. 192 ST., Carson

Permit Number

Date of Notice 1-15-98

Violation Number V 209601

Notice Type: [X] Notice [ ] Notice of Non-Compliance
[ ] Notice of Violation and Order to Comply
[ ] Other

CORRECTIONS HAVE BEEN MADE FOLLOWING ISSUANCE OF THE SUBJECT NOTICE.

Comments: letter of May 5, 1998 to get money from County.

[illegible]

May 5, 1997

Mr Randy McDonald
County of Los Angeles
Department of Public Works
Environmental Programs Division
24320 S. Narbonne Ave
Lomita, CA 90717-1194

re: Discharging wastewater to public property

Dear Mr. McDonald

This is a letter in response to the notice the waste water to the gutters of 192nd street. Because the Victoria Golf Course is a county facility our company the lessee, The Arnold Palmer Golf Management Company, has contacted the county and is going through the channels to get C.I.P. (Capital Improvement Project) money to repair the problem. We have already received an estimate from an environmental firm, and we hope to have this problem resolved soon.

Sincerely,

Tom G. Levin
(3107690

Victoria Golf Course
340 E. 192nd St., Carson CA 90746 ❖ (310) 323-6981 ❖ fax(310) 323-5476
An Arnold Palmer Managed Facility

L.A. COUNTY DPW | HAZARDOUS MATERIALS SYSTEM | REPORT: HMR050.001

DATE COMPILED: 05/25/93 | IW INSPECTION JOB ORDER | INSP#: I000209438

RUN DATE: 01/14/98 10:26:37 | SURVEY REQUEST | ASSC#:

PAGE: 1

FILE #: 010001-009857
ADD: 340 E 192ND ST
CARSON, CA 90746
XSTREET: AVALON BLVD
CONTACT: TOM LEVIN, SUPT

NAME: LA CO VICTORIA GOLF COURSE

AREA: 22 SMD: 95
THOMAS GUIDE: 0069-B2
TEL: 310 532 7690

PROC: SURVEY SAMPLE REQUIRED? N SAMPLE #: _____

INSP INFO: ISSUE NOTICE TO IU CONCERNING INDUSTRIAL WASTE DISCHARGE TO STORM DRAIN SYS. REQUEST LETTER CONCERNING ALT METHOD OF DISPOSING INDW.

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

==========

RESULTS: Notice written to cease discharge To Storm drain system.

REMARKS: _____

INSPECTOR: L. McB. em INSPECTION DATE: 1-15-98

DISP: ER

RVG

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO
P O BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

NOTICE

IN REPLY PLEASE
REFER TO FILE

Date 1-15-98 File No. 10001-00985?-22

To Mr. Kyle Matsuda / Tom Levin Permit No. —

Site Name L.A. Co Victoria Golf Violation No. # 20960V

Site Address 340 E. 192nd ST., Carson

Mailing Address Same

Violation/Instructions:

[ ] Excessive oil/grease/solids in the pretreatment facilities.
[ ] Rain Diversion System is not working properly.
[X] Discharging wastewater to ground, public, or private property.
[ ] Industrial Waste facilities are not built according to approved plans.
[ ] Denied access to Inspector.
[ ] You must submit a letter to this office outlining the steps that will correct the improper disposal of industrial waste and/or wastewater.
[ ] You are required to pump the grease trap/interceptor and maintain the facility in proper working condition at all times.
[X] Other Cease discharging industrial waste water to the storm drain system. Golf cart wash off or, mower wash-off is not allowed to the storm drain or street gutter. Provide this office a letter stating how you are going to correct the problem.
[X] You are required to have the above violation(s) correction by Feb. 2, 1998, and telephone the office shown below for a return inspection.

If you have any questions regarding this matter, please contact Randy McDonald, Monday through Friday, 8:00 a.m. to 9:30 a.m., at (310) 534-4862.

Very truly yours,

HARRY W. STONE
Director of Public Works

By: L. McDonald
Waste Management Division

DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
24320 S. NARBONNE AVE
LOMITA CA 90717-1194

Enc.

VIOL.INS

01000I-009857 MDE/4LKF

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO

REPORT DATE: 02/05/98 CASE #:

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE.
SIGNED: [signature] DATE: FEB 12 1998

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: David Esfandi PHONE: (626) 458-3510 SIGNATURE: M.D. Esfandi
REPRESENTING ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☒ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: LA Co. D.P.W.
ADDRESS: 900 S STREET Fremont Ave CITY Alhambra STATE CA ZIP 91803

RESPONSIBLE PARTY
NAME: LA Co. Dept of Parks & Rec. ☐ UNKNOWN CONTACT PERSON: Tom Levin PHONE: (310) 532-7640
ADDRESS: 433 S STREET Vermont Ave CITY Los Angeles STATE CA ZIP 90020

SITE LOCATION
FACILITY NAME (IF APPLICABLE): Victoria Park & Golf Course OPERATOR: Tom Levin PHONE: (310) 532-7640
ADDRESS: 340 E. STREET 192nd. St. CITY Carson COUNTY LA ZIP 90746
CROSS STREET: Avalon Blvd.

IMPLEMENTING AGENCIES
LOCAL AGENCY / AGENCY NAME: LA Co. D.P.W. CONTACT PERSON: Carl S Jaberg PHONE: (626) 458-3539
REGIONAL BOARD: LA Region CONTACT PERSON: Jim Kuykendall PHONE: (213) 266-7632

SUBSTANCES INVOLVED
(1) NAME: TPH-d 249 ppm B/T/E/X/MTBE = ND/1.64/5.78/14.6/ND ppm QUANTITY LOST (GALLONS) ☒ UNKNOWN
(2) NAME: ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: 01/29/98 HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☒ TANK REMOVAL ☐ OTHER
DATE DISCHARGE BEGAN: ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE: 12/17/97
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☐ REMOVE CONTENTS ☐ REPLACE TANK ☒ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE ☐ OTHER

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY: ☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY: ☒ NO ACTION TAKEN ☐ LEAK BEING CONFIRMED ☐ REMEDIATION PLAN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ POLLUTION CHARACTERIZATION ☐ POST CLEANUP MONITORING IN PROGRESS ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DEFINITIONS)
☐ CAP SITE (CD) ☐ CONTAINMENT BARRIER (CB) ☐ VACUUM EXTRACT (VE) ☐ EXCAVATE & DISPOSE (ED) ☐ EXCAVATE & TREAT (ET) ☐ NO ACTION REQUIRED (NA) ☒ OTHER (OT) None was proposed ☐ REMOVE FREE PRODUCT (FP) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ TREATMENT AT HOOKUP (HU) ☐ ENHANCED BIO DEGRADATION (IT) ☐ REPLACE SUPPLY (RS) ☐ VENT SOIL (VS)

COMMENTS

HSC 05 (11/88)

L-11738-C

L- 21738

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

HARRISON ROBERTS

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CA[illegible] Manifest Document No.: 00001
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Victoria Golf Course, 340 E 192ND ST, Carson, CA
4. Generator's Phone: (310) 53[illegible]-[illegible]
A. State Manifest Document Number: 97250661
B. State Generator's ID:
C. State Transporter's ID:
D. Transporter's Phone: 714-990-6855
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: 310-537-7100

5. Transporter 1 Company Name: NIETO AND SONS TRUCKING, INC.
6. US EPA ID Number: CAT080016116
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address: DEMENNO KERDOON, 2000 N. ALAMEDA STREET, COMPTON, CA 90222
10. US EPA ID Number: CAT080013352

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA HAZARDOUS WASTE LIQUID	001	TT	0100	G	State 221; EPA/Other EXEMPT
b.					State; EPA/Other
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above:
K. Handling Codes for Wastes Listed Above: a. 01 b. c. d.

15. Special Handling Instructions and Additional Information

NO SMOKING
WEAR APPROPRIATE PROTECTIVE CLOTHING
EMERGENCY TELEPHONE # (714) 990-6855

alternate disposal sites: CROSBY & OVERTON, 1630 W. 17th STREET-(310)432-5445, LONG BEACH, CA 90813 CAD028409019

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert [illegible] Signature: [illegible] Month 12 Day 17 Year 97

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GILBERT GARCIA Signature: [illegible] Month 12 Day 17 Year 97

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: JOHN REYNON Signature: [illegible] Month 12 Day 19 Year 97

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

97250661

DTSC 8022A (4/97)
EPA 8700—22

Green: TRANSPORTER RETAINS

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

ENVIRONMENTAL PROGRAMS DIVISION

INSPECTOR'S REPORT

ASSC.# _____

AREA: 22

BUSINESS NAME: Victoria Golf Course FILE # 10001-9857

STREET #: 340 FR: ____ DR: E NAME: 192 SF: ST UNIT ____

CITY: Carson ZIP: ____ TG: ____

XSTREET: ____ CONTACT: ____ TEL: ( )

Received enclosed letter regarding Notice of Jan. 98 for cart wash To storm drain and recent approved plans for site improvements.

L. McA

INSPECTOR

3-9-99

DATE

38-0002 DPW Rev 3/96

Arnold Palmer GOLF

March 5, 1999

Mr Randall McDonald
Los Angeles County
Department of Public Works
Environmental Programs Division
Palos Verdes - Centinela Valley District
24320 South Narbonne Avenue
Lomita, CA 90717-1194

Re. Victoria Golf Course

Dear Mr. McDonald,

Anna McGrath, General Manager of the Victoria Golf Course, mentioned you had visited the property earlier this week and expressed some concern regarding the existing wash down areas for golf carts and equipment As I am sure you are aware, there is a plan to renovate the entire Victoria property, both golf course and structures. Arnold Palmer Golf Management and the County of LA Department of Parks and Recreation are nearing the end of an exhaustive EIR process for the proposed renovation Included in the plan is the installation of a compliant wash down area, complete with necessary debris and oil / chemical separator. We hope to have the project approved and entitled by the summer of this year. When all entitlements are received, the property will be closed for approximately 14 months During that time, the wash area improvements will be made.

If I can answer any questions or provide further information for you, please do not hesitate to call me at (407) 926-2543.

Sincerely,

Christopher Hamill
Director of Development

Cc: Anna McGrath, Victoria Golf Course

Arnold Palmer GOLF MANAGEMENT
Where Everyone Loves the Game™

CHRIS HAMILL
Director of Development

6751 Forum Drive, Suite 200
Orlando, FL 32821
(407) 926-2543
Fax (407) 926-2525
Pager (888) 347-7919
Internet: chamill@palmergolf.com

APPLICATION FOR CLOSURE
HAZARDOUS MATERIAL UNDERGROUND STORAGE
COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
900 SOUTH FREMONT AVENUE
ALHAMBRA, CA 91803-1331
(626) 458-3517

DPW USE ONLY
App. No.: 20_3039
Site File 10001-4857 R/C 22
Fee $ 232
Check [✓] Cash [ ]

TANK OWNER: Contact Name: ~~Victoria Golf Course~~ L.A. County Parks & Rec. Phone: (310) 532-7640
Mailing Address: ~~340 E. 192nd St~~ 433 S. Vermont Ave City: ~~Carson~~ LA State: CA Zip: ~~90746~~ 90020

FACILITY/SITE: Occupant Name: Victoria G.C. Phone: (310) 532-7690
Site Address: 340 E. 192nd St City: Carson State: CA Zip: 90746
Mailing Address: same City: State: Zip:
Contact Person: Tom Levin Title: Superintendent

CONTRACTOR [X]
Contractor Name: Harrison/Roberts OWNER/OPERATOR AS CONTRACTOR [ ] Phone: (562) 795-0088
State License No.: 673178 Class: A/HAZ
Hazardous Substance Removal Certified YES [X] NO [ ]

CLOSURE REQUESTED: Closure of tanks shall be in compliance with Title 23, Division 3, Chapter 16, California Code of Regulations and Chapter 6.7, Health & Safety Code, Article 7, Sections 2670 through 2672

[X] PERMANENT, TANK REMOVAL (See Section 2672(b))
How many underground storage tanks will remain after this closure? 0
[ ] PERMANENT, CLOSURE IN PLACE (See Section 2672(c)) - Attach Justification Statement
[ ] TEMPORARY, (See Section 2671)
[ ] Other:

PLOT PLAN ATTACHED [X] Showing existing tanks product piping & dispenser island. EXISTING HMUSP PERMIT NO.:

TANK DESCRIPTION

TANKS NO.	TANK ID NO. (DPW USE ONLY)	CAPACITY GALLONS	MATERIALS STORED (PAST/PRESENT)	CLOSURE APPLICATION FEE
1	29882	1000	gasoline - past + present	$232.00
2				285.00
3				338.00
4				391.00
5				444.00
6 (+ ATTACH LIST)				$179.00 + 153.00/TANK =

	YES	NO
Has an unauthorized release ever occurred at this site?	[ ]	[X]
Have structural repair ever been made to these tanks?	[ ]	[X]
Will new underground tanks be installed after closure?	[ ]	[X]
Will any wells, including monitoring wells, be abandoned?	[ ]	[X]

NOTICE: CONTAMINATED TANKS AND RESIDUES THAT MAY BE LEFT IN TANKS TO BE CLOSED, MAY BE HAZARDOUS WASTE WHICH MUST BE TRANSPORTED AND DISPOSED OF PURSUANT TO CHAPTER 6.5, CALIFORNIA HEALTH AND SAFETY CODE. FAILURE TO COMPLY MAY BE PROSECUTED AS A FELONY VIOLATION.

By signature below the applicant certifies that all statements and disclosures above are true and correct and that they have read and agree to abide by this permit and all conditions and limitations attached.

Applicant's Signature Robert Blankenship Date 10/7/97
(Print Name) Robert Blankenship Phone (562) 795-0088
Owner [ ] Operator [ ] Contractor [X]

TO BE COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS

PURSUANT TO SECTION 11.80.070B, LOS ANGELES COUNTY CODE, PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS [ ], THIS AUTHORIZATION EXPIRES 180 DAYS FROM THE DATE BELOW.

HARRY W. STONE
Director of Public Works By: Ram Iyer Date: 10/7/97

Complete Certification of Compliance with Los Angeles County Lobbyist Ordinance on back

FORMAT DPW Rev. 7/97

UNDERGROUND STORAGE TANK

CLOSURE INFORMATION

1. This application is for authorization to temporarily or permanently close an underground storage tank (UST) pursuant to Los Angeles County Code, Title 11, Division 4, and California Code of Regulations, Title 23, Division 3, Chapter 16. This application may also be used for product piping removal associated with an existing or removed UST.

2. This application will not be approved unless a valid Hazardous Material Underground Storage Permit (HMUSP) or Unified Program Permit (Unified Permit) application is on file with the Department of Public Works (DPW). HMUSP registration fees may be waived, if the DPW finds that the subject USTs' : a. Have been continuosly empty and out of service since January 1, 1984; b. The owner or operator was never informed by DPW or any other agency of need to properly close USTs.

3. USTs closed on site by removal or cleaning and filling with an inert solid material prior to January 1, 1984, need not comply with current closure requirements, however, leaks from such USTs must be reported and cleaned up.

4. This application must be accompanied by a State Water Resources Control Board UST permit application Form A for each site and Form B for each UST to be removed or closed.

5. All work shall be carried out in full compliance with all applicable Federal, State and local laws, ordinances, rules and regulations.

6. All fees due to DPW and/or the certified Unified Program Agency (CUPA) for the operation and/or maintenance of the facility subject to closure through the date of closure shall be paid.

7. All inspections notification(s) shall be made as directed by the attached conditions of this approval.

8. Within 30 days of the date of closure the applicant shall furnish the DPW a closure report describing all work done, results of any required sampling, disposition of any contaminated soils or materials found and all other requirement made part of the closure application.

9. In all cases, closure permits expire 180 days from the date of issue. It is the responsibility of the owner to make sure that the final report that contains the required information is submitted to the DPW within one month from the sampling date or 180 days from the date of the permit issuance, whichever is earlier. The total number of tanks listed on the HMUSP or Unified Permit and the yearly annual permit maintenence billing will remain unchanged until the closure report is received by the DPW. Only one copy of the closure report need be submitted unless otherwise directed.

10. All closure applications are site specific and may be subject to additional sampling and site characterization requirements as necessary to protect the public health and safety, underground and surface water supplies, and may include requiremen requested by Federal, State or other regulatory agencies.

DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
900 SOUTH FREMONT AVENUE
ALHAMBRA, CA 91803-1331
(626) 458-3517

CERTIFICATION OF COMPLIANCE WITH LOS ANGELES COUNTY LOBBYIST ORDINANCE

This is to certify that I, as permit applicant, for the project located at 340 E. 192nd St., Carson, CA
LOCATION ADDRESS

am familiar with the requirements of Los Angeles County Code Chapter 2.160 et seq., (relating to the Los Angeles County Lobbyist Ordinance) and all persons acting on behalf of myself have complied and will continue to comply therewith throught the application process.

Robert Blankenship
APPLICANT (PRINT NAME)

APPLICANT SIGNATURE

Harrison/Roberts
COMPANY NAME (If employed by an entity/agency)

10/7/97
DATE

FORMAT DPW Rev 7

CLOSURE -- UNDERGROUND STORAGE TANKS

CONDITIONS A -- GENERAL

1. Closures shall be carried out such that all applicable regulations from the following agencies are complied with: Los Angeles County, Department of County Engineer - Facilities; Los Angeles County Fire Department, Fire Prevention Division or the appropriate City Fire Department; South Coast Air Quality Management District; and Los Angeles County Department of Health Services.

2. The County Engineer and Fire Departments shall be notified in advance of any closure in accordance with the following:

   a. Removal of tank shall require a three (3) business day advance notification.

   b. Permanent closure of a tank in place or a temporary closure shall require a 30 day written notification.

3. Consult current fee schedule for costs.

4. All abandoned wells shall be destroyed in such a way that they will not produce water or act as a channel for interchange of water, when such interchange may result in deterioration of the quality of water in any or all water bearing formations penetrated, or present a hazard to the safety and well-being of people and animals.

5. A well destruction permit issued by the Los Angeles Department of Health Services shall be required for all wells requiring a permit for their initial construction.

6. Well destruction shall be accomplished according to methods described in the latest "Water Well Standards: State of California" by the Department of Water Resources, contained in Bulletin 74-81, December 1981, or any other methods that will provide equivalent or better protection.

7. Plans for the decontamination of a facility shall be submitted to the County Engineer for approval no later than 30 days before the commencement of such operations. Other agencies having jurisdiction shall also be notified. These agencies include the California Regional Water Quality Board, the Los Angeles County Department of Health Services, and the South Coast Air Quality Management District.

8. Decontamination shall require the following, as a minimum:

   a. Cleaning operation shall be done under the supervision of persons who understand the hazardous potential of the original liquid stored and its components.

   b. The personnal shall be sufficiently skilled to safely carry out such operation.

   c. Contaminated materials removed from such facility shall be disposed of at legal point of discharge.

   d. The operation shall be carried out in a manner that will not endanger the health of the public and the environment.

CONDITIONS B -- TEMPORARY

1. All temporary closures shall be carried out as indicated in Los Angeles County Fire Department, Fire Prevention Division, Supplement #A -- Inspection Guide #6, "Abandonment or Removal of Underground Tanks," Part A and any other applicable Parts.

CONDITIONS C -- PERMANENT TANK(S) REMOVAL

1. All tank removals shall be carried out as indicated in Los Angeles County Fire Department, Fire Prevention Division, Supplement #A -- Inspection Guide #6, Part D and any other applicable Parts.

2. Owners/operators shall notify the Building Department having jurisdiction at the place of removal if a grading permit is necessary.

3. Removed tanks shall not be transported away from the site until an inspection to establish site integrity is carried by the County Engineer.

4. If an appointment has been arranged with a County Engineer Inspector to inspect the removal of a tank, the inspector will only wait at the site a reasonable amount of time (approximately one hour) after arriving for the removal to commence. Another closure fee may be charged if the inspector has to return to the site.

5. After inspection, tanks shall be transported to a legal disposal point.

6. If the tank has stored materials other than motor fuel, fuel oil or waste oil, site integrity shall be demonstrated using the soil sampling and analysis procedures described in CONDITIONS D below.

7. The site shall be backfilled and recompacted to a relative compaction of 90%.

CONDITIONS D -- PERMANENT

1. All permanent closures of tanks in place shall comply with Los Angeles County Fire Department, Fire Prevention Division, Supplement #A -- Inspection Guide #6, Parts B or C, and any other applicable Parts.

2. Owners/operators shall demonstrate part site integrity as follows:

   a. Test borings shall be slant drilled to intercept a point beneath the center of the tank, if possible. If slant drilling is not feasible, the test borings may be drilled vertically and the reason stated in the report in 2.b. below.

   b. For single tanks, a minimum of two test borings will be required, each located on opposite sides of the tank along the major axis of the tank.

   c. For multiple tanks, as a minimum, borings shall be placed at 20 foot intervals around the tank cluster. The actual number and location of borings shall be evaluated on a case-by-case basis. Tanks separated by 20 feet or more shall be considered single tanks for the purposes of test location and placement.

   d. Soil samples shall be taken at depths of 5, 10, 20, 30 and 40 feet below grade level.

   e. A Shelby Tube or a Modified California Sampler shall be utilized for taking all soil samples.

   f. Soil samples shall be capped immediately with teflon or aluminum.

   g. Soil samples shall not be extruded in the field but are to be immediately placed in a refrigerated ice chest and transported to a state certified laboratory for analysis, using suitable methods.

   h. A report containing the results of the above analysis shall be submitted to the County Engineer.

3. If the soil analysis in 2. above indicates the presence of contaminants, the County Engineer shall require a site investigation as described in Chapter V of the County's "Underground Storage of Hazardous Materials -- Guidelines."

NOTICE TO CLOSURE PERMIT APPLICANTS

The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective August 6, 1988.

In addition to the requirements of your Closure Permit, persons excavating any underground storage tank that previously contained VOC's must:

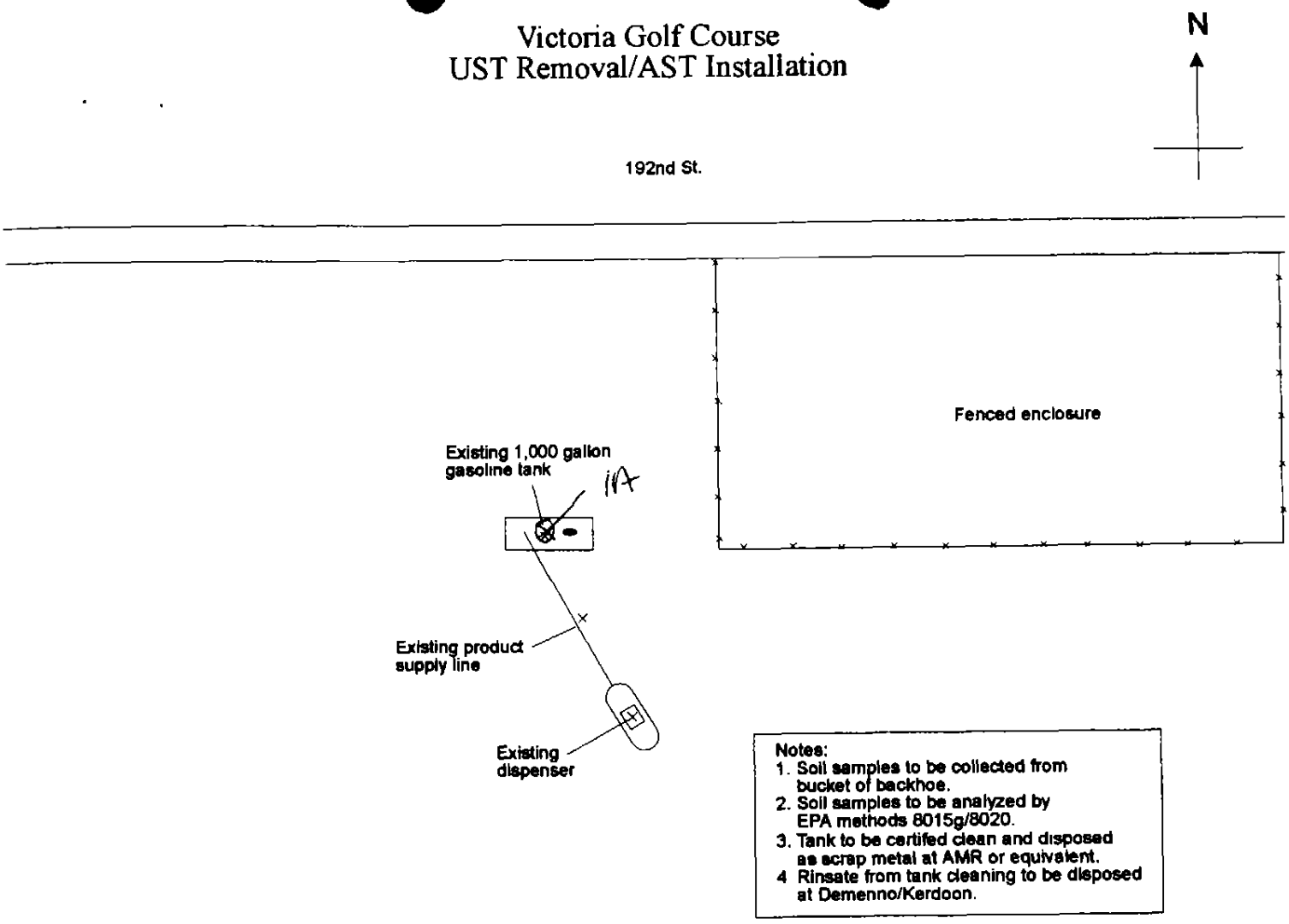
- Notify the SCAQMD Executive Officer by telephone at (310) 403-6000 24 hours prior to tank excavation. 1166(c)(1)(A)
- Monitor the excavated material during the excavation for VOC contamination. 1166(c)(1)(B)
- When VOC contamination is detected:
  * Cease excavation
  * Cover the contaminated soil until implementation of approved mitigation measures. 1166(c)(1)(C)
  * Notify the SCAQMD Executive Officer at (714) 396-2000 within 24 hours of detection of VOC contaminated soil. 1166(c)(2)(A)
- A person shall not engage in or allow any on-site or off-site spreading of VOC contaminated soil which results in uncontrolled evaporation of VOC to the atmosphere. 1166(c)(3)

Exemptions

- Treatment of less than one (1) cubic yard of contaminated soil. 1166(d)(1)(A)
- Decontamination of soil containing organic compounds that have initial boiling point of 302°F or greater, Reid Vapor Pressure less than 80mm Hg or Absolute Vapor Pressure less than 36mm Hg at 20°C. 1166(d)(1)(B),(F)
- Removal of soil for sampling purposes pursuant to EPA methods. 1166(d)(1)(C)
- Accidental spillage of five (5) gallons or less of VOC. 1166(d)(1)(D)
- Documentation of soil which is contaminated through natural seepage of VOC from oil and gas wells or other natural sources. 1166(d)(1)(E)

SPECIFIC QUESTIONS ON RULE 1166 SHOULD BE REFERRED TO THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (909) 396-2000

Victoria Golf Course
UST Removal/AST Installation



Notes:
1. Soil samples to be collected from bucket of backhoe.
2. Soil samples to be analyzed by EPA methods 8015g/8020.
3. Tank to be certifed clean and disposed as scrap metal at AMR or equivalent.
4. Rinsate from tank cleaning to be disposed at Demenno/Kerdoon.

Harrison/Roberts Environmental Management 11140 Los Alamitos Blvd. #203 Los Alamitos, CA 90720 (562) 795-0088	Site: Victoria Golf Course Address: 340 E. 192nd St. Carson, CA 90746 Project: UST Removal	Legend × = sample location 1 inch = 15 feet

CLOSURE PERMIT SUPPLEMENT
HAZARDOUS MATERIALS UNDERGROUND STORAGE
LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
900 S. FREMONT AVENUE
ALHAMBRA, CA 91803

apb
Closure Permit No.: 203039
File No. 10001-9857

PART 1 OF 2

To satisfy the permanent closure requirements for underground storage tanks previously storing hazardous materials, site integrity must be demonstrated by the analysis of soil samples and, if applicable, groundwater samples as outlined below. These requirements are in addition to the conditions listed on the Application for Closure or contained in an approved Closure Plan.

1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.

2. For each SP, samples shall be obtained at the following depths:

SP	Depth(s)	Compounds	Analysis Method
1A	2-4' below tank invert	TPH (G)	8015 (M)
		BTEX, MTBE	8020
1 sample at dispenser	2-4' below	"	"
1 sample at 1st dispenser	2-4' below piping every 20ft starting	"	"

dn4/FPERMIT Rev. 3/90

Cont'd on Page 2

3. All soil samples obtained shall be discrete, undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.

4. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most downgradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.

5. The analytical results for all soil samples shall be expressed milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Practical quantitation limits of 5-10 ug/kg (ppb) for volatile organics and 1 mg/kg (ppm) for the petroleum hydrocarbons must be achieved by the laboratory. Analytical results for groundwater samples shall be expressed in ug/l (ppb) and practical quantitation limits of .5-5 ug/l (ppb) for volatile organics, and 1 mg/l (ppm) for petroleum hydrocarbons must be achieved by the laboratory.

6. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determiantion; d) The method of analysis; e) Signature of chemist certifying results.

7. All soil/groundwater samples obtained shall be handled and transported to laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.

8. If the soil/groundwater analysis indicates undefined contamination at the facility, additional sampling shall be required to define the vertical and lateral extent present.

9. A final report that contains all of the above required information shall be submitted to the office above within one (1) month from the sampling date or 180 days from the date of this permit, whichever is earlier.

ATTENTION CONTRACTOR

NOTIFICATION/PERMIT REQUIREMENTS

This Closure Authorization is issued subject to compliance with all applicable laws and regulations relating to the performance of work including, but not limited to, business license requirements, Building Codes, Fire Codes, Air Quality regulations, Health and Safety Codes, Water Codes, and Transportation regulations.

Pursuant to Los Angeles County Code, Section 11.78.045, and the Conditions and Limitations of the attached Hazardous Materials Underground Storage Closure Authorization, you are required to complete ALL of the agency notifications indicated below within the time period specified prior to commencement of work on this closure.

[X] 72 HOURS - DEPARTMENT OF PUBLIC WORKS INDUSTRIAL WASTE ENGINEERING INSPECTOR:

>>>Unless otherwise noted DPW inspectors are available at the following offices, Monday through Friday, between 8:00 a.m. and 9:30 a.m. **ONLY**.<<<

[ ] WHITTIER AREA - (562) 906-8426
13523 E. Telegraph Rd., Whittier, CA 90605

[X] CENTINELA VALLEY AREA - (310) 534-4862 or 534-4859
24320 S. Narbonne Ave., Lomita, CA 90717

[ ] LENNOX AREA - (310) 534-4862 or 534-4859
24320 S. Narbonne Ave., Lomita, CA 90717

[ ] SAN GABRIEL VALLEY AREA - (626) 574-0962
125 S. Baldwin Ave., Arcadia, CA 91007

[ ] SAN DIMAS AREA - M, W, & F - (626) 574-0961 or T & TH - (626) 961-9611
125 S. Baldwin Ave., Arcadia, CA 91007

[ ] EAST LOS ANGELES AREA - (213) 260-3466
5119 E. Beverly Blvd., Los Angeles, CA 90022

[ ] NEWHALL AREA - (805) 253-7207
23757 W. Valencia Blvd., Santa Clarita, CA 91355

[X] 48 HOURS (OR AS REQUIRED) - LOCAL FIRE DEPARTMENT FIRE PREVENTION INSPECTOR:

[ ] City of _____

[X] Los Angeles County Fire Department 310 - 830 - 9596

[X] 24 HOURS - SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

(909) 396-3886

[✓] COUNTY SERVES AS BUILDING OFFICIAL, SEE ATTACHED.

FAILURE TO PROVIDE NOTICE AS REQUIRED ABOVE MAY RESULT IN PERMIT REVOCATION, ADDITIONAL SITE ASSESSMENT REQUIREMENTS, AND/OR ADMINISTRATIVE PENALTIES AS PROVIDED BY LAW.

DIRECTORY OF LOS ANGELES COUNTY BUILDING & SAFETY DIVISION OFFICES

*Unless specifically indicated, all offices are open 8:00 a.m. to 4:30 p.m. Monday through Friday except legal holidays**

CENTRAL OFFICE

(Mon.–Thurs. 7:00 a.m. – 5:00 p.m., Closed Friday)

900 South Fremont Ave., 3rd Floor, Alhambra, CA 91803
Building Section — (818) 458-3173, FAX (818) 458-2861
Electrical Section — (818) 458-3180
Mechanical Section — (818) 458-3182

DISTRICT OFFICES

8 Antelope Valley #6-499
335A East Ave. K-6
Lancaster CA 93535
(805) 723 4440 FAX (805) 723 4435

4 Bellflower *(Closed 12-1)* #6-249
16600 Civic Center Drive Suite 200
Bellflower, CA 90706
(310) 804 2588 FAX (310) 920-2125

9.1 Calabasas/Malibu #6-661
4111 N Las Virgenes Road
Calabasas, CA 91302
(818) 880 4150, FAX (818) 880 6279

13 Carson *(M-Th, 7-6)* #6-242
(Closed FRIDAY)
701 E Carson Street
Carson, CA 90745
310) 830-7600, FAX (310) 513-6243

6 East Los Angeles #6-027
5118 E Beverly Blvd
Los Angeles, CA 90022
(213) 260-3450, FAX (213) 267-4422

1 Firestone *(Closed 1-2)* #6-126
7807 S Compton Avenue
Los Angeles, CA 90001
(213) 566-6541, FAX (213) 586-6526

2 La Puente #6-686
16005 E. Central Avenue
La Puente, CA 91744
(818) 961-9611, FAX (818) 961-8166

12 Lomita/Lennox #6-110
24320 S Narbonne Avenue
Lomita, CA 90717
(310) 534-3760, FAX (310) 530-5482

6 San Gabriel Valley #6-616
125 S. Baldwin Avenue
Arcadia, CA 91007
(818) 574-0941, FAX (818) 446-4425

8.2 Santa Clarita #6-470
23757 Valencia Blvd
Valencia CA 91355
(818) 984-0610 (805) 253-7211
FAX (805) 253-7215

9 W. Hollywood *(8-10)* #6-016
(Unincorporated Area)
100 Universal City Plaza MT4
Universal City, CA 91608
(818) 782-6284

CITY OFFICES

4.09 Artesia *(8-9)* #6-261
18747 Clarkdale Avenue
Artesia CA 90701
(310) 865 6263 FAX (310) 865-6240

4.07 Bellflower *(Closed 12-1)* #6-249
16600 Civic Center Way Suite 200
Bellflower, CA 90706
(310) 804 2588, FAX (310) 920-2125

5.01 Bradbury *(Tu, F 1-2)* #6-576
600 Winston Street
Bradbury, CA 91010
(818) 358 3218, FAX (818) 303 5154

12.05 Carson *(M-Th, 7-6)* #6-242
(Closed FRIDAY)
701 E Carson Street
Carson CA 90745
(310) 830 7600 FAX (310) 513-6243

4.02 Cerritos *(8-5)* #6-258
18125 Bloomfield Avenue
Cerritos, CA 90701
(310) 860-0311, FAX (310) 865 1944

6.01 Commerce #6-180
2535 Commerce Way
Commerce CA 90040
(213) 887-4455, FAX (213) 888 6841

5.09 Duarte *(M-Th, 7:30-5:30)* –
1600 Huntington Drive #6-139
Duarte, CA 91010
(818) 357-7931, FAX (818) 358-0018

4.03 Hawaiian Gardens #6-072
21815 Pioneer Blvd.
Hawaiian Gardens CA 90716
(213) 420 2641, FAX (310) 496-3708

2.03 Industry #6-686
16005 E Central Avenue
La Puente, CA 91744
(818) 961 9611, FAX (818) 961-8166

5.06 Irwindale *(8-11:30)* #6-687
5050 N Irwindale Avenue
Irwindale, CA 91706
(818) 962-3381, FAX (818) 962-4209

3.01 La Canada Flintridge #6-637
(8-10)
1327 Foothill Blvd
La Canada Flintridge, CA 91011
(818) 790-8651, FAX (818) 790-7536

4.01 Lakewood *(8-5:15)* #6-234
5050 N Clark Avenue
Lakewood, CA 90712
(310) 866 9771, (310) 866-0505

4.08 La Mirada *(8-10)* #6-287
13700 S La Mirada Blvd
La Mirada, CA 90638
(310) 943 0131, FAX (310) 943 1464

2.02 La Puente #6-686
16005 E. Central Avenue
La Puente, CA 91744
(818) 961-9611, FAX (818) 961 8166

7.01 Lawndale *(8-10)* #6-231
14717 S. Burin Avenue
Lawndale, CA 90260
(310) 970 2136, FAX (310) 644 4556

12.04 Lomita #6-110
24320 S Narbonne Avenue
Lomita, CA 90717
(310) 534-3760, FAX (310) 530 5482

12.02 Rolling Hills CE 110
24320 S. Narbonne Ave
Lomita CA 90717
(310) 534 3760 FAX (3[illegible]

12.03 Rolling Hills Est. [illegible]10
24320 S. Narbonne Avenue
Lomita CA 90717
(310) 534-3760, FAX (310) 530 5482

4.05 Santa Fe Springs #6-262
11710 E Telegraph Road
Santa Fe Springs, CA 90670
(310) 868-0511, FAX (310) 868 7112

5.08 Temple City *(8-12)* #6-03
9701 Las Tunas Drive
Temple City, CA 91780
(818) 285 0488, FAX (818) 285 8192

9.02 Westlake Village #6-661
4111 N. Las Virgenes Road
Calabasas, CA 91302
(818) 880-4150, FAX (818) 880 6279

* Inspectors' office hours are 8-9 daily.
– Request Friday inspections on Thurs.

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION

CLOSURE REPORT REQUIREMENTS

A closure report shall be submitted to the County of Los Angeles Department of Public Works, Waste Management Division, P.O. Box 1460, Alhambra, California 91802-1460, containing:

1. File number of facility and closure permit number.

2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.

3. Description of methods for obtaining, handling, and transporting samples.

4. Time and date samples were obtained.

5. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain-of-custody, and groundwater location) for UST closure shall be certified by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils. The certification must clearly state that all work was performed under the supervision of the person signing.

6. Chain-of-custody documentation initiated by person obtaining sample through person at CAL/EPA Department of Toxic Substance Control certified laboratory.

7. Disposal destination of tanks and evidence of legal disposal.

8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction, and methods of analysis.

9. Documentation as to depth of groundwater at facility.

10. Manifests to document hazardous waste disposal of any removed soil and tank rinseate.

11. Any observations of site contamination.

12. Remedial action plan to mitigate contamination.

13. Report to be signed by a California registered geologist, a California certified engineering geologist, or a California registered civil engineer with sufficient experience in soils.

Print Name Robert Blankenship

Signature [signature]

Date 10/20/97

Pink 1 of 3

L.A. COUNTY DPW
DATE COMPILED: 06/26/95
RUN DATE: 05/30/96 19:38:53

HAZARDOUS MATERIALS SYSTEM
TANKS INSPECTION JOB ORDER
SCHEDULED INSPECTIONS

REPORT: HMB150.002
INSP#: I000164917
ASSC#: P0000T1184
PAGE: 1

FILE #: 010001-009857
NAME: LA CO VICTORIA GOLF COURSE
ADD: 340 E 192ND ST
CARSON, CA 90746
AREA: 22 SMD: 95
XSTREET: AVALON BLVB
THOMAS GUIDE: 0069-B2
CONTACT: TOM LEVIN, SUPT
TEL: 310 532 7690

PROC: SAMPLE REQUIRED? N

INSP INFO: _____

PERM TYPE: T O TANK OPERATING PERMIT # OF TANKS: 1 STATUS: PERMITTED

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	12		06/02/96
SAMPLE	00		
SELF-MONITOR	12		06/02/96

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

TANK #	OWNER TANK ID #	CAPACITY (GAL)	CONTENTS
001	01	1,000	REGULAR UNLEADED GASOLINE

CON: SINGLE WALLED
LDS: UNKNOWN

==========

RESULTS: UST last inspected on 6-13-95, during which facility was requested to test UST. Tank test results show that tank passed during test on 1-13-94 but failed on 8-28-95. (See attached copies of tank tests).

Vio

REMARKS: For more information on status of UST, contact: Mark Flowers Arnold Palmer Golf Mgmt. 818/288-6201
Arnold Palmer Golf Mgmt. manages this Victoria Golf Course.

Time: 45 mins

INSPECTOR: I. Azzie INSPECTION DATE: 6-19-96

DISP: _____



CONTRACT ENVIRONMENTAL SERVICE

4055 GUASTI RD, #102
ONTARIO CA. 91761

909-460-6020
800-554-3458

TEST CERTIFICATE

CUSTOMER: VICTORIA GOLF COURSE PHONE: 818-288-1044

(ADDRESS) 340 E. 190TH ST.

CITY: CARSON STATE: CA ZIP: 90746

LOCATION ADDRESS: SAME PHONE:

CITY: STATE: ZIP:

TEST REQUESTED BY: STATE ENVIRONMENTAL DATE: 1-3-94

ITEM OR SYSTEM TESTED

TANK ID#	CAPACITY	TANK TEST RESULTS- P/F	TANK TEST GAL/H	LINE TEST RESULTS- P/F	LINE TEST GAL/H	LEAK DETECTOR P/F
#1 U/L GAS	1000 GAL	PASS	-.0186	PASS	0.0	N/A

REMARKS:

THIS IS TO CERTIFY THAT THE ABOVE TANK(S) AND ASSOCIATED PIPING SYSTEM(S) ARE "TIGHT" AND MEET THE CRITERIA ESTABLISHED BY THE NFPA PAMPHLET 329.

OPERATOR James T. Richards LICENSE # 91-1440

CERTIFICATION DATE
1-3-94



ONTARIO CA, 91761

(909) 460-6020 1-800-554-3458
FAX (909) 460-6016

TANK TEST DATA SHEET

CUSTOMER: STATE ENVIRONMENTAL
BILLING ADDRESS: 7419 VIA PARAISO
RANCHO CUCAMONGA CA 91730

DATE: 1-3-96 TIME: 0900 HRS
SITE ADDRESS: VICTORIA GOLF COURSE
340 E. 190th ST.
CARSON CA. 90746

CONTACT PERSON: BILL LOUKAH PHONE: 818-268-1044
INSTRUCTIONS:

TANK No. 1

TANK AND WATER DATA

TANK SIZE	1000 GAL	MATERIAL	STEEL
TOTAL DEPTH	113"	FILL LENGTH	31"
TANK DIA.	62.00	STAND PIPE	18"
H2O IN TANK	NONE	GROUND H2O	0
TEST WEIGHT = (TOTAL DEPTH + STAND PIPE)			131.000
TEST PRESSURE = Ht.x Wt.-(Ht. of H2O*.036)			3.524

WELL No: DEPTH TO H2O
GRND. ELEV: BASE MEASR:
MONITOR Y/N MANUFACTURER
MODEL TESTED Y/N

PRODUCT DATA

CONTENTS	U/L GAS	API Sp. Gr.	57.8
TEMPERATURE	73.8	API @ 60°F	56.4
COEFFICIENT OF EXPANSION	.6641		
PRODUCT WEIGHT = (141.5/(131.5+API))*(.036)			0.0269
FACTOR (R) = TANK SIZE x COEFFICIENT OF EXP.			0.6641

TEST CALIBRATION (if used)

BEGIN	28	END	31	=	3.0000
BEGIN	28	END	31	=	3.0000
BEGIN	28	END	31	=	3.0000
CALIBRATION ROD	.015	*	3 000	=	0.0083

FACTOR A

ACURITE LINE TEST DATA

PUMP SYSTEM	SUCTION	MANUFACTURER	BENNETT
ISOL. MECH:	S. V.	TEST P.S.I.	408
TIME BEGIN	0715	CYL. LEVEL	.0525
TIME END	0745	CYL. LEVEL	.0525
CONCLUSION	PASS	LEAK RATE	0.0

LINE LEAK DETECTOR DATA

MODEL No:	N/A	MANUFACTURER	
SERIAL No:		TEST LEAK RATE	
OPENING TIME		HOLDING P.S.I.	
METERING PSI		RESILIENCY	
		CONCLUSION:	

CONTRACT ENVIRONMENTAL SERVICE

TANK TEST DATA SHEET

CUSTOMER: STATE ENVIRONMENTAL SITE: VICTORIA GOLF COURSE DATE: 1-3-96

MONITOR PERIOD RESULTS---TANK No. 1									
FACTOR (A)				.0083	FACTOR (B)			.6641	NET VOLUME CHANGE
TIME	PRODUCT LEVEL RESULTS			PRODUCT CHANGE +/- GALLONS	TEMPERATURE COMPENSATION			NET EXPANSION+ CONTRACTION-	
	START	END	GAIN+ LOSS-		START	END	GAIN+ LOSS-		
0630	28	28	0	-0.0000	.873	.874	0.001	0.0007	-0.0007
36	28	28	0	0.0000	0.874	.873	-0.001	-0.0007	0.0007
42	28	28	0	0.0000	0.873	.874	0.001	0.0007	-0.0007
48	28	27	-1	-0.0083	0.874	.876	0.002	0.0013	-0.0096
54	27	26	-1	-0.0083	0.876	.874	-0.002	-0.0013	-0.0070
0700	26	26	0	0.0000	0.876	.878	0.002	0.0013	-0.0013
06	26	26	0	0.0000	0.878	.876	0.000	0.0000	0.0000
12	26	26	0	0.0000	0.876	.875	-0.001	-0.0007	0.0007
18	26	26	0	0.0000	0.875	.875	0.000	0.0000	0.0000
24	26	26	0	0.0000	0.875	.875	0.000	0.0000	0.0000
MONITOR PERIOD RESULTS					LEAKAGE INDICATED				-0.0179

TEST PERIOD RESULTS									
TIME	START	END	GAIN+ LOSS-	CHANGE +/- GALLONS	START	END	GAIN+ LOSS-	EXPANSION+ CONTRACTION-	NET VOLUME CHANGE
30	26	26	0	0.0000	.875	.876	0.001	0.0007	-0.0007
--	--	--	--	------	------	------	------	------	------
48	25	25	0	0.0000	0.876	.875	-0.001	-0.0007	0.0007
54	25	25	0	0.0000	0.875	.877	0.002	0.0013	-0.0013
0900	25	24	-1	-0.0083	0.877	.878	0.001	0.0007	-0.0090
06	24	24	0	0.0000	0.878	.878	0.000	0.0000	0.0000
12	24	24	0	0.0000	0.878	.878	0.000	0.0000	0.0000
18	24	24	0	0.0000	0.878	.878	0.000	0.0000	0.0000
24	24	24	0	0.0000	0.878	.878	0.000	0.0000	0.0000
TEST PERIOD RESULTS					LEAKAGE INDICATED				-0.0186
TEST CRITERIA PASS/FAIL				PASS	STANDARD DEVIATION +/-				.0033

SCHUESTER TEL-A-LEAK [OVERFILL VOLUMETRIC TANK TESTING SYSTEM]

Orange County Tank Testing, Inc.
225 North Loara Street, Anaheim, California 92801 (714) 776-0300

TEI SYSTEM 5000 SUMMARY SHEET

Non-Volumetric Underground Storage Tank System Leak Test

WO#: 2222

Client: VITORIA GOLF COURSE
340 E 192ND
CARSON,CA

Date: 8-28-95
County: LA

Site: VICTORIA GOLF COURSE
340 E 192ND
CARSON,CA

Tank #	Product Description	Tank Capacity	Tank Liquid	Tank Ullage	Product Line Rate/Result	Leak Detector
1	UNLEADED	1,000	FAIL	FAIL	FAIL	N/A
2						
3						
4						
5						
6						

Signature: [signature]

Date: 8-28-95

Tech. License #: 92-1118
Technician Name: R.DODGE

Comments:

The Non-volumetric threshold for PASS FAIL is 0.020 GPH as listed by the third party evaluation report and the test procedure.

This precision tank testing system exceeds the criteria required by Local, State and Federal NFPA #329 and EPA UST Technical Standards Part 280 for precision testing systems.

DATA CHART
For Use With

DATE 8-28-95

STATION NUMBER

1 LOCATION VICTORIA GOLF COURSE 340 E 192ND LAKEWOOD, CA

2 OWNER

3 OPERATOR

4 REASON FOR TEST ANNUAL TEST

5 TEST REQUESTED BY

6 SPECIAL INSTRUCTIONS

7 CONTRACTOR OR COMPANY MAKING TEST
MECHANIC(S) NAME OCITT

TECHNICIAN: 92-1118

8 IS A [illegible] TEST TO BE MADE WITH THIS LINE TEST? ☒ YES ☐ NO

9 MAKE AND TYPE OF PUMP OR DISPENSER (SUCTION OR SUBMERSIBLE)

10 WEATHER TEMPERATURE IN TANKS °F °C

COVER OVER LINES

APPROXIMATE BURIAL DEPTH

11 IDENTIFY EACH LINE AS TESTED	12 TIME (MILITARY)	13 LOG OF TEST PROCEDURES, AMBIENT TEMPERATURE, WEATHER, ETC.	14 PRESSURE psi OR kPa		15 VOLUME			16 REMARKS
			BEFORE	AFTER	BEFORE	AFTER	NET CHANGE	SIZE, LENGTH & TYPE OF LINE, & FLEX CONNECTORS CONCLUSIONS, REPAIRS AND COMMENTS
UNLEND	8:30	START TEST	—	15	—			LINE WOULD NOT HOLD
	8:40	LINE AT 0 LBS						

TOTAL P.02

Tom Levin # Superintendent

L.A. COUNTY DPW
DATE COMPILED: 10/05/93
RUN DATE: 05/31/95 21:23:43

HAZARDOUS MATERIALS SYSTEM
TANKS INSPECTION JOB ORDER
SCHEDULED INSPECTIONS

REPORT: HMB150.002
INSP#: I000135353
ASSC#: P0000T1184
PAGE: 1

FILE #: 010001-009857 NAME: LA CO VICTORIA GOLF COURSE
ADD: 340 E 192ND ST
CARSON, CA 90746 AREA: 22 SMD: 95
XSTREET: AVALON BLVB THOMAS GUIDE: 0069-B2
CONTACT: Tom Levin, Supt. TEL: 310/532-7690

PROC: SAMPLE REQUIRED? N

INSP INFO: _____

PERM TYPE: T O TANK OPERATING PERMIT # OF TANKS: 1 STATUS: PERMITTED

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	12		06/02/95
SAMPLE	00		
SELF-MONITOR	12		06/02/95

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

TANK #	OWNER TANK ID #	CAPACITY (GAL)	CONTENTS
001	01	1,000	REGULAR UNLEADED GASOLINE
CON: SINGLE WALLED			LDS: UNKNOWN

==========

RESULTS: UST information correct. UST monitored by tank testing. (Notice issued to provide recent tank test records)

REMARKS: Inspection concent: Tom Levin, Superintendent
Time: 1 hr

INSPECTOR: I. Azie INSPECTION DATE: 6-13-95

DISP: _____

V138588

Arnold Palmer Group

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION

HAZARDOUS MATERIAL UNDERGROUND STORAGE INSPECTION

HMS UPDATE
BY _____
DATE _____
INSP# _____
-HQ USE ONLY-

BUSINESS NAME: Victoria Golf Course FILE NO: 0160001 009857 AREA: 22
STREET NO.: 340 FR: DR: E NAME: 192nd Street SF: UNIT:
CITY: Carson, CA ZIP: 90746 TG: 69 B2
XSTREET: Avalon Blvd CONTACT: Tom Levin TEL: 310 532 7690

UST OWNER NAME: LA County Parks & Recreation [ ] CORPORATION [ ] INDIVIDUAL [ ] PARTNERSHIP [✓] GOV AGENCY [ ] OTHER
IS UST OWNER THE OPERATOR? [ ] YES [✓] NO: OPERATORS NAME Arnold Palmer Golf Mgmt. Co.
MAILING NAME: Victoria Golf Course ADDRESS: 340 E. 192nd Street
CITY: Carson, CA ZIP: 90746 - TEL: 310 532 7690

CONSENT TO INSPECT: [✓] YES [ ] NO
CONTACT: Tom Levin TITLE: Grounds Supt. TEL: 310 532 7690

INVENTORY RECONCILIATION:	YES	NO	N/A
1. Inventory records complete (No records)	[ ]	[ ]	[✓]
2. Allowable variations exceeded	[ ]	[ ]	[✓]
3. Product dipstick in good condition	[✓]	[ ]	[ ]
4. Water/Gas indicating paste utilized	[ ]	[✓]	[ ]

UST AND PIPING:

1. UST and piping locations and configurations consistent with approved plans	[ ]	[ ]	[✓]
✓ 2. Precision tank integrity test records reviewed: Date last tested NO			
3. Corrosion protection system installed	[ ]	[✓]	[ ]
Date last maintenance certification			
✓ 4. Overfill protection/fillpipe installed	[ ]	[✓]	[ ]
Date installed N/A			

MONITORING SYSTEM:

✓ 1. Identify method of monitoring/leak detection: Tank Test			
2. Established procedures for alarms notification	[ ]	[ ]	[✓]
3. Monitoring tapes/read-out reviewed	[ ]	[ ]	[✓]
4. Self-diagnostic or calibration program performed	[ ]	[ ]	[✓]
Date last maintenance certificate N/A			

MONITORING WELLS:

1. Wells located per approved plans	[ ]	[ ]	[✓]
2. Wells properly surface sealed and clearly marked	[ ]	[ ]	[✓]

ON-SITE RECORDS:

1. Last 12 months leak detection records	[ ]	[✓]	[ ]
2. Copy of performance claims (third party certification) for leak detection method	[ ]	[✓]	[ ]
3. Tank and/or associated piping system repairs	[ ]	[✓]	[N/A]
4. Tank and/or piping leak detection system maintenance (last 12 months)	[ ]	[ ]	[✓]
5. Certification of financial responsibility (petroleum sites only)	[ ]	[ ]	[✓]

Location of records if not on-site Whittier Rangers Office

OTHER:
OUTSIDE OPERATIONS: None

SURFACE RUNOFF: None
UST dipsticked about three(3) times per week for fuel purchase orders only. No records of readings kept.

CORRECTIVE ACTION REQUIRED:
You are requested to send/fax Lomita office copy of annual tank integrity test records; not later than 7-13-95.

[✓] Pursuant to Los Angeles County Code, Title 11, Division 4, §11.84.020, correction of the above conditions is required within 30 days from the date of this notice. Upon completion of corrective action, contact the undersigned at (310) 534-4862 between 8:00 am and 9:30 pm for compliance verification. Fax 310/530-5482

By: I. AZIE DATE 6-13-95
Inspector, Waste Management Division

The undersigned hereby acknowledges receipt of a copy of this report and/or Notice:

Name Tom G. Levin
Title Superintendent Date 6-13-95

RED/SURVEY.UST 02/24/94

-HQ USE ONLY-

OFFICE RECORD VERIFICATION	YES	NO	N/A
1. Operating Permit Current	[ ]	[ ]	[ ]
2. Permit Application and State Forms A & B Complete	[ ]	[ ]	[ ]
3. Backlogged: Correspondence Violations Inspections (Circle Items)	[ ]	[ ]	[ ]
4. Outstanding Fees	[ ]	[ ]	[ ]
5. Inventory Reconciliation Verification	[ ]	[ ]	[ ]
6. Notification Prior to Tank or Piping Integrity Test	[ ]	[ ]	[ ]
7. Report of Tank or Piping Integrity Test	[ ]	[ ]	[ ]
8. Date of Most Recent Test _____			
9. Reports of Unauthorized Releases	[ ]	[ ]	[ ]
10. Records or Certification of any Repairs	[ ]	[ ]	[ ]
11. Tank Closure Documents	[ ]	[ ]	[ ]

PROVISIONAL
HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
2250 ALCAZAR STREET
LOS ANGELES, CALIFORNIA 90033

PERMIT NO. 1184

EXPIRATION DATE MAR 17 1988

PERMISSION IS HEREBY GRANTED UNDER LACC TITLE 11, DIVISION 4 TO:

	<<<<<<<< FILE NUMBER
009857-22	<<<<<<<< PERMITTEE
LA CO FMD VICTORIA GOLF COURSE 01100 N EASTERN AVE LOS ANGELES CA 90063	
	<<<<<<<< FACILITY ADDRESS
RE: 00340 E 192ND ST	

TO STORE HAZARDOUS MATERIALS IN UNDERGROUND TANK(S) LOCATED AT THE FACILITY ABOVE.

NUMBER OF PERMITTED TANKS: 1

THIS PROVISIONAL PERMIT IS SUBJECT TO THE FOLLOWING REQUIREMENTS:

PART A — GENERAL CONDITIONS AND LIMITATIONS (ATTACHED).

PART B — AUTHORIZED HAZARDOUS MATERIAL STORAGE TANKS (ATTACHED).

PART C — SPECIFIC CONDITIONS AND LIMITATIONS:

1. THE PERMITTEE SHALL SUBMIT FOR APPROVAL AND IMPLEMENT A LEAK DETECTION PROGRAM (LDP) AND A TANK MONITORING PROGRAM (TMP) PREPARED IN ACCORDANCE WITH "UNDERGROUND STORAGE OF HAZARDOUS MATERIALS - GUIDELINES FOR EXISTING FACILITIES, OCTOBER 1986."

2. THE FOLLOWING TIME SCHEDULE SHALL APPLY TO SUBMITTALS REQUIRED BY THIS PROVISIONAL PERMIT:

   a. PERMIT FEE DUE BY (SEE INVOICE) To be billed

   b. TANK INTEGRITY TEST RESULTS DUE BY ~~SEP~~ DEC 17 1987

   c. PROPOSALS FOR LDP AND TMP DUE BY ~~SEP~~ DEC 17 1987

3. PERMIT EFFECTIVE DATE 6/27/85
   NOTE: THE EFFECTIVE DATE IS DETERMINED BY ORIGINAL DATE OF PERMIT APPLICATION.

PART D — SPECIAL CONDITIONS AND LIMITATIONS ATTACHED. YES [ ] NO [X]

This Provisional Permit is valid only for the continued operation of tanks providing suitable storage and expires six (6) months from the date of issue. Permittee has until the expiration date to complete an approved LDP and to install and be in compliance with an approved TMP. Upon full compliance with the approved LDP and TMP and all other conditions and limitations, this Provisional Permit will be replaced by a full term Operational Permit for the remainder of the unexpired five (5) year term from the effective date unless otherwise noted in Part D above.

T. A. TIDEMANSON
DIRECTOR OF PUBLIC WORKS

SEP 17 1987

BY _____
WASTE MANAGEMENT DIVISION

PP801 10/86

PART B — TANK DATA
HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT NO. 1184

AUTHORIZED HAZARDOUS MATERIAL STORAGE TANKS

TANK NUMBER	CAPACITY (GALLONS)	CONTENTS
1	1,000	Unleaded

HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT

PART A — GENERAL CONDITIONS AND LIMITATIONS

TERM OF PERMIT

1. The combined provisional and full term operational permits shall be valid for a maximum period of five (5) years from the effective date. However, if the Department of Public Works (DPW) finds that the life expectancy of a facility is less than five (5) years, the DPW may adjust the term of the permit to reflect such a condition.

FEES

2. All fees shall be due and payable on the billing date established by the DPW. Fees not paid within 30 calendar days from the billing date shall be considered delinquent. Delinquent fees shall be subject to a 10 percent penalty fee for each 30 day period beyond the billing date that the fee is due. Permits for which the annual permit fee installment is delinquent for 90 days or more are subject to suspension.

REPORTS AND RECORDS

3. At least annually and due by the anniversary of the effective date of this permit, a written report must be submitted to the Department of Public Works, Waste Management Division, P.O. Box 4089 Terminal Annex, Los Angeles, CA 90051 detailing (but not limited to) the following:

   a. Any changes in the type of hazardous materials stored within the facility.

   b. Any changes in the uses of the underground facility.

   c. Changes or modifications to monitoring procedure.

   d. A detailed account of any unauthorized discharges, and the remedial measures employed.

   e. Any modifications to the facility except for routine required maintenance.

   In the event there has been no change of operation nor unauthorized release, a negative declaration to that effect may be submitted.

   The report or negative declaration shall be certified by the permittee or an authorized representative who is responsible for operations at the facility.

   This report is required by local agencies to satisfy Section 25286(c) of the State of California Health and Safety Code. A report form will be made available to owners and operators to comply with this requirement. The report shall be delinquent 30 days after its due date and as such may result in suspension or revocation of the permit.

4. Every permittee shall provide testing, monitoring (if applicable), and inspections in compliance with this permit and shall maintain records adequate to demonstrate compliance therewith.

5. All required records shall be maintained by the permittee and made available for inspection for a period of time not less than three (3) years from the date of the required annual report for the year during which the testing, monitoring or inspection was performed. Said records shall be made available to the DPW, County Health Officer or Forester and Fire Warden during normal working hours and at any time upon reasonable notice.

RENEWALS AND EXTENSIONS

6. If this is a provisional permit, it may be extended to a maximum of one (1) additional year upon written application stating the reasons for such a request and upon approval by the Director of Public Works.

7. Every application for the renewal of a operational permit or extension of a provisional permit shall be made at least 30 days prior to the expiration date of such permit. If a timely application for renewal has been submitted, the permit shall remain in effect until the DPW has made a decision and any administrative appeal has been exhausted.

APPEALS

8. Any person dissatisfied with the decision of the DPW may appeal the decision, in writing, to the Appeals Board, setting forth with particularity the ground or grounds for the appeal. Such appeal shall be submitted within 30 days after notice of the decision has been given.

ADDITIONAL APPROVALS AND REPAIRS

9. Additional approvals shall be required for any of the following actions:

   a. Tank repair.

   b. Modifications.

   c. Change or addition of hazardous materials stored.

   d. Change of approved monitoring system.

10. Procedures for an application for a permit shall also apply to an application for an additional approval. Each application for an additional approval shall be accompanied by the appropriate fee and supporting information.

11. Any substantial modification or repair of a facility other than minor repairs or emergency repairs shall be in accordance with plans to be submitted to the DPW as an additional approval.

12. Permittee shall carry out routine maintenance, ordinary upkeep and minor repairs in a careful and safe manner. No permit will be required for such maintenance, upkeep and repairs.

13. Permittee may make emergency repairs to a facility in advance of seeking an additional approval whenever an immediate repair is required to prevent or contain an unauthorized discharge or to protect the integrity of the containment. However, within five (5) working days after such emergency repairs have been started, permittee shall seek additional approval by submitting drawings or other information adequate to describe the repairs to the DPW.

CLOSURES, DECONTAMINATION AND NEW CONSTRUCTION

14. Replacement of tanks at an existing facility shall be considered a closure of the tanks to be replaced and a new installation of tanks, and all fees shall be assessed accordingly.

15. No tank shall be abandoned. Tanks which are temporarily out of service, and are intended to be returned to use, must continue to be monitored and inspected. Any tank which is not being monitored and inspected must be closed or removed in a manner approved by the DPW.

16. Prior to any permanent or temporary closures being initiated, an Application for Closure form, the appropriate fee and required supporting information shall be filed with the DPW.

17. Plans for the decontamination of a facility shall be submitted to the DPW for approval no later than 30 days before the commencement of such operations. Other agencies having jurisdiction shall also be notified. These agencies include the California Regional Water Quality Control Board, the Los Angeles County Department of Health Services and the South Coast Air Quality Management District.

18. The installation of a new tank shall require submittal to the DPW of an application for new construction, the appropriate new construction plan clearance fee and supporting information as required by the DPW.

TRANSFERS

19. A Hazardous Materials Underground Storage Permit may be transferred to a new owner of the same facility provided:

   a. The new owner accepts full responsibility for all obligations under this permit at the time of the transfer of the facility.

   b. The transfer shall be documented on a form provided by the DPW within 30 days of transfer of ownership.

   c. The appropriate fee is paid.

UNAUTHORIZED DISCHARGES

20. As soon as any person in charge of a facility or responsible for emergency response for a facility has knowledge of any confirmed or unconfirmed unauthorized discharge of a hazardous material, such person shall take all necessary steps to ensure the discovery, containment, and cleanup of such discharge and shall notify the DPW of the occurrence as required.

21. Any owner or operator who has knowledge of a confirmed unauthorized discharge shall immediately notify the DPW.

22. Within the jurisdiction of the Los Angeles County Fire Department, an unauthorized discharge shall also be reported to the Los Angeles County Forester and Fire Warden, Fire Prevention and Conservation Bureau.

23. The permittee shall institute and complete all actions necessary to remedy the effects of any unauthorized discharge, whether sudden or gradual, and supply information on such actions to the DPW.

24. The continued use of, and permit approval for, existing facilities is subject to review and modification or termination by the DPW whenever there has been any unauthorized discharge. In determining whether continued underground storage in such facility is suitable, the DPW shall consider the age of the facility, the methods of containment, the methods of monitoring, the feasibility of the required retrofit, the concentration of the hazardous materials contained, the severity of potential unauthorized discharge and the suitability of other long term preventive measures.

EVALUATIONS AND INSPECTIONS

25. Whenever the approval or satisfaction of the DPW may be required for a design, monitoring, testing or other technical submittal by a permittee, the DPW may require such permittee, at the permittee's sole cost and expense, to retain a suitable qualified independent engineer, chemist or other appropriate professional consultant acceptable to the DPW, for the purpose of evaluating and rendering a professional opinion respecting the adequacy of such submittal.

26. The DPW may conduct inspections for the purpose of ascertaining compliance by the permittee and effecting corrections of any conditions which would constitute any violation of any statute, code, rule or regulation affecting the underground storage of hazardous materials.

27. Whenever necessary for the purpose of investigation or enforcement, or whenever a representative of the DPW, County Health Officer, or Forester and Fire Warden has reasonable cause to believe that there exists in any structure or upon any premises any condition which constitutes a violation, said representative may enter such structure or premises at all reasonable times to inspect the same, or to perform any duty imposed by law.

28. The permittee shall conduct regular inspections of the facility to assure compliance with this permit and shall maintain logs or file reports in accordance with this permit.

29. The DPW may require the periodic employment of special inspectors to conduct an audit or assessment of permittee's facility to make a hazardous material safety evaluation and to determine compliance.

30. Permittee shall, within 30 days of said evaluation, file with the DPW a plan to implement all recommendations, or shall demonstrate to the satisfaction of the DPW why such recommendations shall not be implemented.

31. The DPW may require that any regular or special inspection by the permittee be made in the presence of a representative of the DPW. The DPW may further require advance notice of not less than 72 hours as to the availability of equipment, material and personnel required to conduct such inspections.

SUSPENSIONS AND REVOCATIONS

32. This permit is subject to suspension or revocation if conditions exist which would justify denial of a permit or if permittee fails to correct unsatisfactory conditions.

33. Failure to adhere to all applicable conditions and limitations of this permit shall constitute a willful violation of Title 11, Division 4 of the Los Angeles County Code and may result in civil or criminal penalties, revocation of this permit, or both.

PROVISIONAL PERMIT APPLICATION SUPPLEMENT
HAZARDOUS MATERIALS UNDERGROUND STORAGE
COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION
550 SOUTH VERMONT AVENUE, LOS ANGELES, CA 90020

THIS FORM MUST ACCOMPANY ALL HMUSP APPLICATIONS
*****See instructions on back of this form*****

DUE DATE

FILE NO 9857
PERMIT NO 1184
R/C CODE 22
SIC CODE
STATE ID# 20845
TGP TGC

IF NO UNDERGROUND TANKS AT THIS FACILITY, GO TO PARTS F & G

(A)
Victoria Golf Course
FACILITY NAME
1100 N. Eastern Avenue
MAILING ADDRESS
70
Los Angeles, California 90063
CITY STATE ZIP
340 East 192nd. Street, Carson
FACILITY LOCATION

(B) APPLICATION FOR (CHECK ONE ONLY):

EXISTING TANKS	[x]
NEW CONSTRUCTION	[ ]
REPAIR*[ ] MODIFICATION*	[ ]
ADDITIONAL INSTALLATION*	[ ]
CHANGE OF MATERIAL STORED*	[ ]

*ADDITIONAL APPROVAL

(C) ASSESSOR PARCEL IDENTIFICATION (OBTAIN FROM PROPERTY TAX BILL):

MAP BOOK NUMBER_____ PAGE NUMBER_____ PARCEL NUMBER_____

(D) THIS SUPPLEMENT MUST BE ACCOMPANIED BY:

EXISTING TANK APPLICATIONS

* STATE PERMIT APPLICATION FORM(S) FOR EACH CONTAINER, OR	[ ]
COPIES OF H.S.S.S. AS FILED WITH STATE (FOR EACH CONTAINER)	[x]
* A STATEMENT VERIFYING SAFE STORAGE FOR EACH CONTAINER	[x]
* HMUSP APPLICATION FEE (COMPLETE PART E)	[x]

NEW CONSTRUCTION APPLICATIONS

* STATE PERMIT APPLICATION FORM(S) FOR EACH CONTAINER	[ ]
* FOUR (4) SETS OF CONSTRUCTION PLANS AND SPECIFICATIONS	[ ]
* HMUSP APPLICATION FEE (COMPLETE PART E)	[ ]

(E) HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT (HMUSP) FEE SCHEDULE

NUMBER OF TANKS:	HMUSP APPLICATION FEE	+	STATE SURCHARGE	=	TOTAL FEES DUE
1 - 5	$76	+	$28 PER TANK	=	$104.00
6 - 20	$152	+	$28 PER TANK	=	
21 OR MORE	$228	+	$28 PER TANK	=	
ADDITIONAL APPROVALS	$38 EACH TANK		NONE	=	

EXAMPLE: 6 TANKS = $152 + 6($28) = $320 = TOTAL FEES DUE
MAKE CHECKS PAYABLE TO "L. A. COUNTY DEPARTMENT OF PUBLIC WORKS"

(F) TO BE FILLED OUT BY PERSONS CLAIMING AN EXEMPTION TO REGULATION

[ ] THERE ARE NO UNDERGROUND STORAGE TANKS WITHIN THIS FACILITY.
[ ] **FINAL** INTERCEPTOR(S) REGULATED UNDER INDUSTRIAL WASTE PERMIT #_____.
[ ] UNDERGROUND STORAGE TANK WITHIN THIS FACILITY IS USED **ONLY** FOR THE EMERGENCY SPILL CONTAINMENT FOR ABOVE GROUND STORAGE TANKS.
[ ] OTHER (ATTACH A WRITTEN STATEMENT)

(G) ALL PERSONS FILING THIS FORM MUST COMPLETE THIS SECTION:

SIGNATURE Robert E. Kibby TITLE Head of Plumbing Craft

PRINTED NAME Robert E. Kibby DATE 6/17/85

Official Registration Form

California Water Resources Control Board

Hazardous Substance Storage Statement

Who Must File: Each person storing hazardous substances in an underground container must file this registration form by July 31, 1984 and no later than annually thereafter as long as the tanks used for storage are not removed.

Definition of Underground Containers. The law applies to any and all containers not exempted by the list below, underground containers. Water Code section 13291 defines underground containers as any and all containers and any connecting pipelines that are beyond the normal ground surface. Even though a tank sitting on the ground is not included, containers partially beneath the surface are included. Lined or unlined pits, ponds and lagoons are covered if earth has been removed from the storage area to form a pit, but not if the activity normally grading is not considered construction below ground level.

Definition of Hazardous Substance. Any substance listed in Section 25281 of the Health and Safety Code, but not including any substance regulated as a pesticide by the Department of Food and Agriculture, any substance regulated as a source, special nuclear or by-product material by the Department of Health Services, any substance the handling of which is subject to regulation by the Public Utilities Commission, hazardous waste, and any substance which is a component part of a manufactured product prepackaged for use by the consumer.

Fee. For each tank registered a $10 fee must be paid except that retail gasoline stations pay $5 per tank.

Penalties are assessed by the penalty of $500-$5,000 per day. If you falsify information you can be fined up to $25,000 for each day the information is incorrect and has not been corrected.

Confidentiality. If you have information you believe is protected by trade secret laws please attach a list of the information on this form that is confidential and the section of the confidentiality including certification of relevant statutes and case law.

Multiple Containers. Fill out Parts I and II on the first page only and fill out Parts III, IV and V on all the remaining pages. Attach additional pages if you have more than 20 tanks. You can file information on a single facility for up to 20 tanks on one form.

This is not a Permit Application. Underground tanks will be subject to local, state and federal laws and regulations. Check with your local fire department or further information.

NOTE. ALL UNDERGROUND CONTAINERS MUST REGISTER EVEN IF STATE AND/OR LOCAL PERMITS ARE IN FORCE.

I Owner

Name (Corporation, Individual or Public Agency): Los Angeles County Mechanical Department Technical Services Division

Street Address: 1100 N. Eastern Ave. | City: Los Angeles | State: CA. | ZIP: 90063

II Facility

Facility Name: Victoria Golf Course | Owner, Foreman, Supervisor: L.A. County Mechanical Dept.

Street Address: 340 E. 192 St. | Nearest Cross Street: Avalon

City: Carson | County: Los Angeles | ZIP:

Mailing Address: 1100 N. Eastern Ave. | City: Los Angeles | State: CA. | ZIP: 90063

Phone + area code: (213) 267-2242 | Type of Business: ☒ 01 Motor Vehicle Fuel Station ☐ 02 Other ____

Number of Tanks at this Facility: 1 | Rural Areas Only: Township | Range | Section

III 24 Hour Emergency Contact Person

Days Name (last name, first) and Phone + area code: John Howard D-4 (213) 803-4421

Nights Name (last name, first) and Phone + area code: Chief Security Guard (213) 974-1234

COMPLETE THE FOLLOWING ON A SEPARATE FORM FOR EACH CONTAINER

IV Description

A ☒ 01 Tank ☐ 02 Sump ☐ 03 Lagoon Pit or Pond ☐ 04 Other ____ | Container Number: # 1

B Manufacturer (if appropriate) N/A Year of Mfg N/A | C Year Installed ____ ☒ Unknown

D Container Capacity 1,000 gallons ☐ Unknown | E Container Repairs ☐ 01 None ☒ 02 Unknown ☐ 03 Yes Year ____

F Is Container currently used? ☒ 01 Yes ☐ 02 No If No, year of last use ____ ☐ 03 Unknown

G Does the Container Store (Check One) ☐ 1 Waste ☒ 02 Product

H Does the Container Store Motor Vehicle Fuel or Waste Oil? ☒ 1 Yes ☐ No If Yes Check appropriate boxes)

☒ 01 Leaded ☐ 02 Regular ☐ 03 Premium ☐ 04 Diesel ☐ 05 Waste Oil ☐ 06 Other (List) ____

V Container Construction

A. Thickness of Primary Containment ____ ☐ Gauge ☐ Inches ☐ cm ☒ Unknown

B ☐ 01 Vaulted (Located in an underground Vault) ☐ 02 Non-vaulted ☒ 03 Unknown

C ☐ 01 Double Walled ☐ 02 Single Walled ☐ 03 Lined ☐ 04 Wrapped ☒ 05 Unknown ☐ 06 None

D ☒ 01 Carbon Steel ☐ 02 Stainless Steel ☐ 03 Fiberglass ☐ 04 Polyvinyl Chloride ☐ 05 Concrete ☐ 06 Aluminum

☐ 07 Steel Clad ☐ 08 Bronze ☐ 09 Composite ☐ 10 Non-metallic ☐ 11 Earthen Walls

☐ 12 Unknown ☐ 13 Other ____

E. ☐ 01 Rubber Lined ☐ 02 Alkyd Lining ☐ 03 Epoxy Lining ☐ 04 Phenolic Lining ☐ 05 Glass Lining ☐ 06 Clay Lining

☐ 07 Unlined ☒ 08 Unknown ☐ 09 Other ____

F ☐ 01 Polyethlene Wrap ☐ 02 Vinyl Wrapping ☐ 03 Cathodic Protection ☒ 04 Unknown ☐ 05 None ☐ 06 Other ____

VI Piping

A Associated Piping:	☐ 01 Above Ground	☒ 02 Underground	☐ 03 Vaulted	
B Underground Piping:	☐ 01 Gravity	☐ 02 Pressure	☒ 03 Suction	☐ 04 Unknown
C Piping Repairs:	☐ 01 None	☒ 02 Unknown	☐ 03 Yes Year of most recent repair: _____	

VII Leak Detection

☐ 01 Visual ☒ 02 Stock Inventory ☐ 03 Tile Drain ☐ 04 Vapor Sniff Wells ☐ 05 Sensor Instrument

☐ 06 Ground Water Monitoring Wells ☐ 07 Pressure Test ☐ 08 Internal Inspection ☐ 09 None

☐ 10 Other: _____

VIII Chemical Composition of Materials *Currently* or *Previously* Stored in Underground Containers

If you checked yes to IV-A you are not required to complete this section

currently stored	previously stored	Chemical Code (Use Commercial Name, Use additional paper for more)
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	
☐ 01	☐ 02	

Is Container Located on an Agricultural Farm? ☐ Yes ☐ No

IX IMPORTANT! Read instructions before signing:

Signature: [illegible] a principal executive officer at the level of vice president [illegible] authorized representative. The representative [illegible] of the facility where the tanks are located [illegible] a principal executive officer [illegible] representative of a public agency [illegible] the penalty of perjury and to the best of my knowledge [illegible]

Bruce Palmer — Date: 6-8-94

Bruce L. Palmer — Mechanical Dept. Deputy Director — (213) 267-2105

Send check to: [illegible]

Bruce L. Palmer — (213) 267-2105

For additional forms or more information call 916/324-1262

FOR STATE USE ONLY

ID Number		Court Number	
Date Received	☐ 01	☐ 02	☐ 03

84 31597

COUNTY OF LOS ANGELES
FACILITIES MANAGEMENT DEPARTMENT
1100 NORTH EASTERN AVENUE, LOS ANGELES CALIFORNIA 90063 - (213) 267-2101

GEORGE Y. TICE
Director

June 17, 1985

Mr. Carl Sjoberg
Sanitation Division
550 S. Vermont Blvd.
Los Angeles, CA 90020

Dear Mr. Sjoberg:

VERIFICATION OF SAFE STORAGE
FOR HAZARDOUS MATERIALS

Inventory records do not indicate an appreciable loss of product from any of the tanks or piping systems located at Victoria Golf Course, 340 East 192nd. Street, Carson, CA.

Our inventory program consists of manually entering the amount of fuel dispensed during each fueling transaction, the vehicle number, the odometer reading and the pump meter reading.

Every morning, at approximately the same time, a dip stick reading is taken and entered on the log sheet. The site attendant also checks the pump meter readings to make sure it corresponds with the reading on the log sheet and the total amount of fuel dispensed the previous day. The current date is entered on the log sheet where the daily transactions will start.

At the end of each week and on the last day of the month all log sheets are submitted to the Fiscal Management Division for evaluation.

To the best of my knowledge there are no leaks at this facility.

Very truly yours,

GEORGE Y. TICE, Director
Facilities Management Department

Bruce Palmer
Bruce E. Palmer
Deputy Director

RK:als

ITEM	DIST IV	FUEL CAPACITY	FUEL TYPE	UNIT COST	BID PRICE
63	Lakewood Sheriff Station I-7542-1B	8,400	Unleaded		
	5130 Clark Avenue P-1189	7,600	Unleaded		
	Lakewood F-1165B	600	Diesel		
	SID 20851	500	Waste Oil		
64	Norwalk Sheriff Station I-5284-1K	4,000	Unleaded		$
	12335 Leffingwell Road P-1183	8,000	Unleaded		
	Norwalk A-406A	8,000	Diesel		
	SID 20846	565	Diesel		
		4,000	Jet Fuel		
65	Firestone Sheriff Station I-12724-29	2,000	Unleaded		$
	7901 S. Compton Avenue P-4546	8,000	Unleaded		
	Los Angeles	100	Diesel		
		500	Waste Oil		
66	Lynwood Sheriff I-9836-2G	2,000	Unleaded		$
	11330 Bullis Road P-1145	12,000	Unleaded		
	Lynwood	500	Diesel		
	SID 20868	500	Waste Oil		
67	Pico Rivera Sheriff Station	4,000	Unleaded		$
	6631 Passons Boulevard I-5229-1L	8,000	Unleaded		
	Pico Rivera P-1186	500	Diesel		
	SID 20853	550	Waste Oil		
68	Sheriff Aero Bureau I-12725-1C	10,000	Unleaded		$
	4324 Donald Douglas Drive P-TEMP	12,000	Jet Fuel		
	Long Beach				
69	Carson Sheriff Station I-9859-22	4,000	Unleaded		$
	21356 Avalon Boulevard P-1187	12,000	Unleaded		
	Carson	1,000	Diesel		
	SID 20854	4,000	Aviation Fuel		
		550	Waste Oil		
70	Victoria Golf Course I-9859-[illegible]	1,000	Unleaded		$
	340 E. 192nd Street P-1184				
	~~Los Angeles~~ CARSON SID 2[illegible]				
71	Lakewood Golf Course I-9858-1B	1,000	Unleaded		$
	3101 Carson Street P-1185				
	Lakewood				
72	La Mirada Golf Course I-9860-1N	1,000	Unleaded		$
	15501 E. Alicante Road P-1188				
	La Mirada				
	SID 20695				$

Dames & Moore

Tank Testing Service
8145 Byron Road
Whittier, CA 90606
(213) 945-7537

11-19-86
860.4.3

Tank Owner: Los Angeles Co./Victoria Golf Course
Tank Address: 340 E. 192nd St.
Los Angeles,CA

Test Date: 10-15-86
Tank No.: 20845
Product: Unleaded
Capacity (gal): 1000

Attention: Joe Mohr

Following are the results of precision tests conducted in accordance with NFPA 329 and State of California criteria on the tank noted above.

[X] System tested tight. [ ] Test indicates a leak. [ ] Test was inconclusive.

Test period: Lower elevation 46 minutes/Upper elevation 45 minutes.

[ ] No significant loss/gain observed. [ ] Test indicates tank is tight.
[ ] Test has similar gain/loss at both elevations;indicates a tight system.
[X] Tank test at elevation 74 inches showed gain of .0308 gal/hour.
[X] Piping/system test at elevation 95 inches showed gain of .0106 gal/hour.
[ ] Test at elevation ____ showed ( ) of _____ gal/hour.

[ ] Loss/gain attributed to thermal contraction/expansion.
[ ] Correction for thermal expansion/contraction was ____ gal/hr.
[ ] Gain attributed to vapor pocket.[ ] System must be vented and retested.
[ ] Retest must be scheduled(see attached Recommended Procedure).
[ ] Check valve leaks.

COMMENTS

[ ] Leak indicated between ____ and ____ inches from tank bottom.
[ ] Leak indicated at bung or pipe connection to tank top.
[ ] Leaking manhole cover suspected.
[ ] Elevation of leak could not be determined due to leaking check valve, vapor, or cocked fill pipe.

Tested by: David Antisdel

Signature: Wm E Kellers

Date: 10-19-1986

DAMES & MOORE
TANK TESTING SERVICE
DATA SHEET

Owner : LACO/VICTORIA GOLF COURSE Test Date: 10-15-86
Address: 340 E. 192ND ST.
LOS ANGELES,CA

Contact: JOE MOHR

TANK DATA

Tank Number: 20845

Construction material: STEEL

Operator: LACO/VICTORIA GOLF COURSE
340 E. 192ND ST.
LOS ANGELES, CA

Type of pump: SUCTION

Capacity: 1000 gallons.

Product: UNLEADED GASOLINE

Vapor recovery system: NONE

TANK DIMENSIONS

Diameter: 62 inches.

Top of fill pipe to top of tank: 51 inches.

Length: 77 inches.

Fill Pipe Diameter: 4 inches.

Bottom of tank to top of fill: 113 inches.

MISCELLANEOUS

Date/time system was filled: 10-14-86

Type of product used to fill: UNLEADED GASOLINE

Coefficient of expansion for product: .0007 gal./Deg. F

Depth to groundwater(if known): feet.

Comments:

Test Conducted By: DA

DAMES & MOORE
TANK TESTING SERVICE
TEST REPORT

Owner : LACO/VICTORIA GOLF COURSE
Address: 340 E. 192ND ST.
LOS ANGELES,CA

Test Date: 10-15-86

Contact: JOE MOHR

TEST DATA

Tank Number: 20845

Test No.: 1

Time Start: 1233

Elevation in Tank: 74 inches.

Time Finish: 1319

Product Temperature: 23 C

Ambient Temperature: 28 C

Calibration:

Start: 20 ml 44 lines.
End : 20 ml 24 lines.

Calculation Data:

Time: 20 minutes.
Number of lines: 66

Calculation:

$$\frac{20 \text{ ml cal.}}{34 \text{ lines cal.}} \times \frac{66 \text{ lines}}{20 \text{ minutes}} \times 60 = 116.47 \text{ ml/hour.}$$

Results:

Test shows a gain rate of 116.47 ml/hour (0.0308 gal/hour).

Indicated tank condition:

Test No.: 2

Time Start: 1345

Elevation in Tank: 95 inches.

Time Finish: 1430

Product Temperature: 23 C

Ambient Temperature: 26 C

Calibration:

Start: 20 ml 0 lines.
End : 20 ml 2 lines.

Calculation Data:

Time: 15 minutes.
Number of lines: 1

Calculation:

$$\frac{20 \text{ ml cal.}}{2 \text{ lines cal.}} \times \frac{1 \text{ lines}}{15 \text{ minutes}} \times 60 = 40.00 \text{ ml/hour.}$$

Results:

Test shows a gain rate of 40.00 ml/hour (0.0106 gal/hour).

Indicated tank condition: TIGHT

Date Checked

PROVISIONAL PERMIT

REVIEW CHECK LIST

RD
NL

File No. 8857
Permit No. 1184

[ ] ___ NL 1. Application supplement -- completed, signed and dated.

___ ___ [ ] Submitted
___ ___ [ ] Not submitted

[ ] ___ N 2. Number of tanks under provisional permit 1.

[ ] ___ N 3. Correct number of Application for Permit to Operate Tank forms. 1
___ ___ Number of missing forms ___.

[ ] ___ N 4. Fees.
___ ___ Permit effective date 6-27-85.

___ ___ County 1st Year ___ State Surcharge ___
+ 2nd Year ___ - Amt Paid ___
- Amt Paid ___ = Total Due ___
- Amt in Trust ___
= Total Due ___

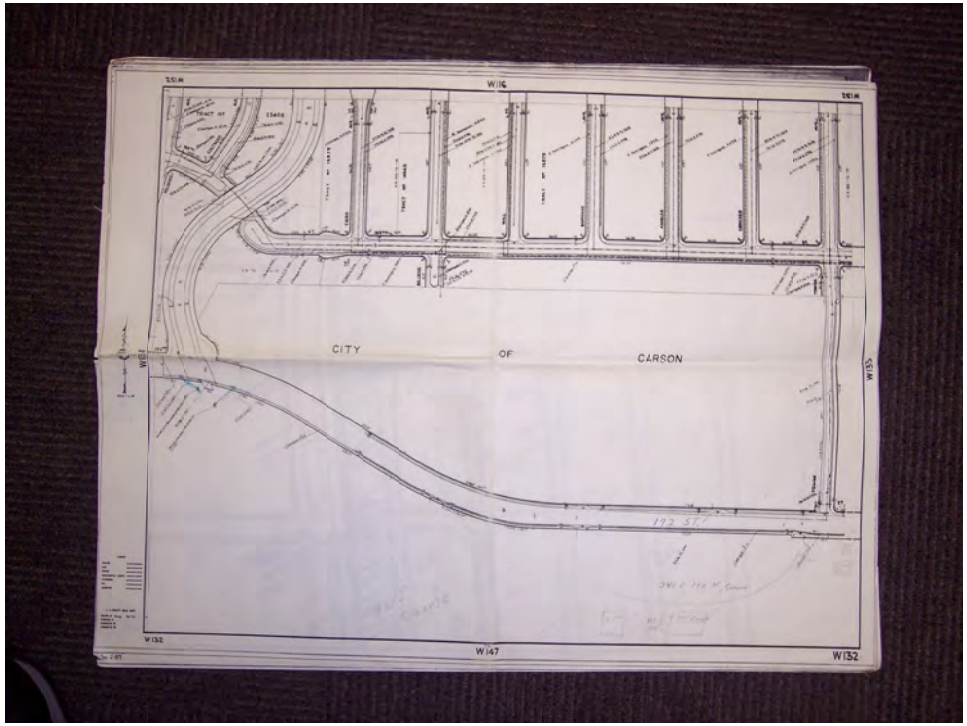
___ ___ Made to Subfund & Finance? [ ]Y [ ]N

___ ___ 5. Request letter sent? [ ]Y [ ]N Date Sent ___.

[ ] ___ ___ 6. Provisional permit issuance date ___.

>>>

>>>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CARSON
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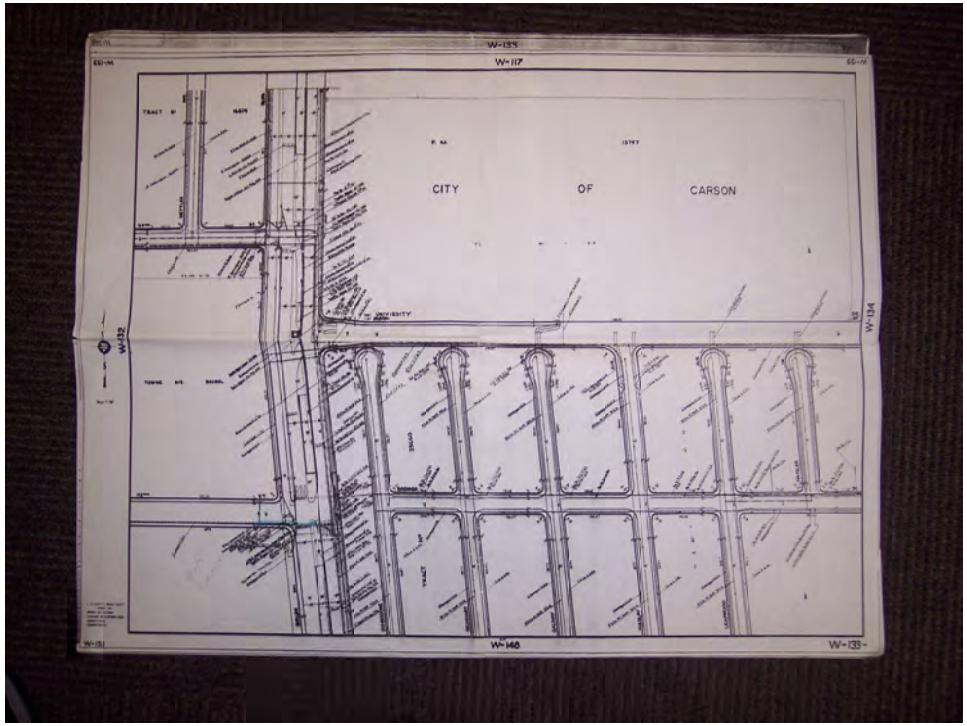
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W-140
W-131
W-133


W-133
W-147
W-148
CITY
OF
CARSON
W-162
W-163

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Environmental Programs Division
900 S Fremont Avenue
Alhambra, CA 91803-1331
Telephone (626) 458-3517 Fax: (626) 458-3569

To be completed by DPW only
Site 01000 1 File 047197
Application No A497347
Permit 497447
Area 22 Jurisdiction C
Thomas Guide Pg

APPLICATION FOR INDUSTRIAL WASTE DISPOSAL PERMIT

Check One
☐ New permit ☐ Permit Revision ☒ Change of Ownership (Effective Date 9/1/2006) ☐ Non-use permit

PERMITTEE (OPERATOR) (Legal Company Name) VICTORIA PUBLIC GOLF, LLC. ☐ Corporation ☐ Partnership ☐ Individual Tel. 310-323-4174

LOCATION ADDRESS 340 E. 192ND ST. (Street) CARSON (City) CA (State) 90746 (Zip) Fax 310-323-5476

MAILING ADDRESS 3550 WILSHIRE BLVD #1930, (Street) LOS ANGELES, (City) CA (State) 90010 (Zip)

TYPE OF INDUSTRY GOLF COURSE (General Description) 20-4215460 (Federal SIC No)

PROPERTY OWNER/ADDRESS 3550 WILSHIRE BLVD. #1930, LOS ANGELES, CA 90010

ASSESSORS PARCEL IDENTIFICATION. Map Book 7339 Page 017 Parcel # 905 (From tax bill)

NUMBER OF EMPLOYEES (Full Time) 15 (Part Time) 35 Lot Size (SQ. FT.)

GENERAL DESCRIPTION - Describe for each disposal method. Multiple disposal methods may require separate permits. Attach additional sheets if necessary. A minimum of four sets of engineered plans are required.

Method of disposal ☐ Public sewer, ☐ Private underground disposal system, ☐ Surface waters, stream or storm drain, ☐ Haul to legal disposal point, ☐ Other (describe)

Subject to SUSMP approval ☐ Yes ☒ No If yes, approved Q_{PM} (cfs)

Raw materials used (attach MSDs where appropriate)

Products produced

Wastewater producing operations WASHING GOLF CARTS

Constituents of waste discharge GREASY WATER

Hours of plant operation 5:00 AM to 8:00 PM Days per week (Check days) ☑M ☑T ☑W ☑Th ☑F ☐Sa ☐Su

Average daily wastewater flow rate (gal per day) 400 Time of discharge 9:00 AM to 9:00 PM

Estimated five-minute peak wastewater flow rate (gal per min) 8 Days per week ☑M ☑T ☑W ☑Th ☐F ☐Sa ☐Su

Indicate any daily, monthly, and seasonal variation, if any

As a condition of the issuance of the permit herein applied for, the applicant agrees to submit additional information as may be required by the Director of Public Works Permits may be subject to additional conditions and limitations An inspection fee may be required upon permit issuance

PERSON RESPONSIBLE FOR WASTE DISCHARGE:

I AFFIRM THAT ALL INFORMATION FURNISHED IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

NAME (Please print) BRIAN WHANG TITLE MANAGER

SIGNATURE DATE 9/11/06

TELEPHONE 213-368-1444

RETURN THIS APPLICATION, REQUIRED PLANS, SUPPORTING INFORMATION AND AN APPLICATION/PLAN REVIEW FEE OF $ 191.00 PAYABLE TO	COUNTY OF LOS ANGELES DEPT. OF PUBLIC WORKS ENVIRONMENTAL PROGRAMS DIVISION 900 South Fremont Ave , Alhambra, California 91803-1331

Complete Certification of Compliance with Los Angeles County Lobbyist Ordinance on back IWDP-DPW 1 Rev 3/02

~~$294.00~~ $ 191.00 E.A.

CERTIFICATION OF COMPLIANCE WITH LOS ANGELES COUNTY LOBBYIST ORDINANCE

This is to certify that I, as permit applicant, for the project located at 340 E. 192nd St. Carson CA
LOCATION ADDRESS

am familiar with the requirements of Los Angeles County Code Chapter 2 160 et seq., (relating to the Los Angeles County Lobbyist Ordinance) and that all persons acting on behalf of myself have complied and will continue to comply therewith through the application process.

BRIAN WHANG
APPLICANT (PRINT NAME)

APPLICANT SIGNATURE

VICTORIA PUBLIC GOLF, LLC.
COMPANY NAME (If employed by an entity/agency)

9/11/06
DATE

INFORMATION REGARDING LOS ANGELES COUNTY CODE CHAPTER 2.160

The purpose of this handout is to provide a simplified explanation of Los Angeles County Code Chapter 2.160 so that individuals may become familiar with the County Lobbyist Policy This document is only intended to be used as a supplement to the County Ordinance

Q What is the purpose of the County Lobbyist Ordinance?

A Prior to August 28,1992, the County did not regulate the activities of persons who lobby county officials The Ordinance does not prohibit lobbying activities, but instead seeks to define a County Lobbyist and requires such individuals to register as such with the Board of Supervisors

Q Who does this Ordinance apply to?

A. This Ordinance applies to all persons applying for permits, licenses, contracts, franchises or grants from the County

Q What does this Ordinance require?

A This Ordinance requires County Lobbyists to register with the Executive Officer of the Board of Supervisors The initial registration must be filed within 20 days of first becoming a County Lobbyist. Renewals are to be filed within 20 days of the end of each calendar quarter All applicants for a County permit, license, franchise or grant must certify that they are familiar with the requirements of Los Angeles County Code Chapter 2.160

Q What constitutes a County Lobbyist?

A. County Lobbyist means any individual who is employed, contracts or otherwise receives compensation for influencing official action.

Q What defines influencing official action?

A Official action means the drafting, introduction, consideration, modification, enactment or defeat of any County Ordinance or Board of Supervisors motion or resolution, or the granting or denial of any County contract, permit, grant or license

Q Where can I find more information regarding this Ordinance?

A A complete copy of the Ordinance is available for public review at all public counters in the Department of Public Works. Further information can be obtained by contacting.

Executive Office of the Board of Supervisors
500 West Temple Street
Los Angeles, CA 90012
(213) 974-1043

IWDP-DPW.1 Rev 3/02

INDUSTRIAL WASTE DISPOSAL PERMIT
OPERATING PERMIT-LOCAL SEWER

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
P. O. BOX 1460
ALHAMBRA, CA 91802-1460 TEL: (626) 458-3517

PERMIT NO: 000497447
EFFECTIVE DATE: 09/19/06
EXPIRATION DATE:

PERMISSION IS HEREBY GRANTED TO:

VICTORIA PUBLIC GOLF, LLC 3550 WILSHIRE BLVD #1930 LOS ANGELES, CA 90010	<<<<< PERMITTEE	010001 047197 22 340 E 192ND ST BRIAN WHANG (213) 368-1444	<<<<< FILE NUMBER/AREA <<<<< FACILITY ADDRESS <<<<< PRIMARY CONTACT <<<<< CONTACT PHONE

TO TREAT/STORE/DISPOSE INDUSTRIAL WASTE MATERIALS LOCATED AT THE FACILITY INDICATED ABOVE, UNDER THE SANITARY SEWER AND INDUSTRIAL WASTE ORDINANCE FOR:

CITY OF CARSON LOCAL ORDINANCE/CSDLAC EXEMPT	<<<<< AREA/CITY <<<<< JURISDICTION	MC, AVIII, C5, S8505 OCC AUTO REPR, CAR WASH, WASH DOWN	<<<<< ORDINANCE/MUN CODE <<<<< INDUSTRY

THE INDUSTRIAL WASTE OPERATIONS REGULATED BY THIS PERMIT CONSIST OF THE FOLLOWING:
WASTE GENERATING OPERATIONS: WASHING GOLF CARTS
CONSTITUENTS: GREASY WATER WITH SUSPENDED SOILIDS
DISCHARGE TIME: FROM 19.00.00 TO 07.00.00 DISCHARGE DAYS: M TU W TH F SA SU
AVERAGE FLOW: 400 GAL PER DAY PEAK FLOW: 8 GAL PER MIN
FACILITY: 501-800 GAL, 3 COMP, PRECAST
SPEC INFO: CAR WASH FOR GOLF COURSE CARS ONLY L.A. COUNTY STANDARD WITH 510 GALLON CAPACITY

THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

A1 COND & LIM, PUBLIC SEWER
A2 COND & LIM, PUBLIC SEWER (CONTD)
B1 WASTES NOT AUTHORIZED, PUBLIC SEWER AND ON-SITE
C1 GENERAL CONDITIONS & LIMITATIONS
D1 EFFLUENT LIMITS, JOINT OUTFALL

THE PLANS APPROVED IN CONJUNCTION WITH THIS PERMIT AND ANY PLANS REFERENCED HEREIN ARE MADE PART OF THIS PERMIT. THE INDUSTRIAL WASTE CONTROL ENGINEERING INSPECTOR IN YOUR AREA WILL EXPLAIN THE PERMIT CONDITIONS, AND MAKE PERIODIC INSPECTIONS OF YOUR OPERATIONS. THIS PERMIT IS SUBJECT TO ANNUAL INDUSTRIAL WASTE INSPECTION FEES.

DONALD L. WOLFE
DIRECTOR OF PUBLIC WORKS

BY _____
ENVIRONMENTAL PROGRAMS DIVISION

DATE OF ISSUANCE: 09/26/06

38-003 DPW 12/86

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
P. O. BOX 1460
ALHAMBRA, CA 91802-1460 TEL: (626) 458-3517

INDUSTRIAL WASTE DISPOSAL PERMIT

PERMIT NO: 000497447
EFFECTIVE DATE: 09/19/06
EXPIRATION DATE:

PERMISSION IS HEREBY GRANTED TO:

VICTORIA PUBLIC GOLF, LLC 3550 WILSHIRE BLVD #1930 LOS ANGELES, CA 90010	<<<<< PERMITTEE	010001 047197 22 340 E 192ND ST BRIAN WHANG (213) 368-1444	<<<<< FILE NUMBER/AREA <<<<< FACILITY ADDRESS <<<<< PRIMARY CONTACT <<<<< CONTACT PHONE

TO TREAT/STORE/DISPOSE INDUSTRIAL WASTE MATERIALS LOCATED AT THE FACILITY INDICATED ABOVE, UNDER THE SANITARY SEWER AND INDUSTRIAL WASTE ORDINANCE FOR:

CITY OF CARSON LOCAL ORDINANCE/CSDLAC EXEMPT	<<<<< AREA/CITY <<<<< JURISDICTION	MC, AVIII, C5, S8505 OCC AUTO REPR, CAR WASH, WASH DOWN	<<<<< ORDINANCE/MUN CODE <<<<< INDUSTRY

POST THIS AT YOUR LOCATION

PERMIT

```
 TRANS: INSP            HMS INSPECTION DISPLAY/UPDATE          OPER: E523779
  PROG: PWC160                                                 09/17/08 08:06:32

   ACTION: _ (A)DD  (C)HANGE  (D)ELETE  (B)ROWSE  A(S)SC # BROWSE
    FILE #: 010001 047197 NAME: VICTORIA PUBLIC GOLF LLC       SEC? N  STAT: PERM
 STREET #: 340   FR:       DR: E   NAME: 192ND                 SF: ST   UN:
     CITY: CARSON                  ZIP: 90746       AREA: 22  TEL: 310 323 4174
    INSP #: I 000584682    INSP TYPE: I FOLL    INSP DT: 091608   INSP DISP: COMP
    ASSC #: V 000584199  ASSC # TYPE: I INFN  ASSC # DT: 091008 ASSC # DISP:

INSP PROC: STD_______      SAMP REQ? _     SELF MONT? _

INSP INFO: CLARIFIER_EXCESSIVE_SOLIDS_____________________________________
           ___________________________________________________________________

  RESULTS: CLARIFIER_PUMPED_CLEAN._SB_PH=7,NO_SLUDGE_OR_FLOATABLES._FINAL_STAGE
           _NO_SLUDGE_OR_FLOATABLES._CONSENT_TO_INSPECT_SCOTT_WAKIMURA_________


ASSIGN DT: 091608             DUE DT: 093008        ASSIGN TO: 47913_ MOD___
 START DT: ______            COMP DT: 091608          COMP BY: 479130 MOD___
 DMS LINK: HTTP://PWDMS04/CSHMSEPDUSTRESULTS.ASP?DOCNO=000584682&DOCTYPE=INSP
                                    LAST TRAN/DATE/OPER: INSP 091708 E523779
 UPDATE COMPLETED
```

L.A. COUNTY DPW — HAZARDOUS MATERIALS SYSTEM — REPORT: PWB150.001
DATE COMPILED: 03/27/08 — IW INSPECTION JOB ORDER — INSP#: I000583565
RUN DATE: 08/28/08 18:51:33 — SCHEDULED INSPECTIONS — ASSC#: P000497447
PAGE: 1

FILE #: 010001-047197 NAME: VICTORIA PUBLIC GOLF LLC
ADD: 340 E 192ND ST
CARSON, CA 90746 AREA: 22 SMD: 95
XSTREET: AVALON BLVD THOMAS GUIDE: 0764-D3
CONTACT: BRIAN WHANG TEL: 213 368 1444
AIN: 7339 017 902

PROC: STD SAMPLE REQUIRED? N

INSP INFO: CLARIFIER NEXT TO GOLF WASHING AREA

PERM TYPE: I 01 OPERATING PERMIT-LOCAL SEWER STATUS: PERMITTED
JURIS: C LOCAL ORDINANCE/CSDLAC EXEMPT
INDUSTRY: 212 OCC AUTO REPR, CAR WASH, WASH
FACILITY: 4B 501-800 GAL, 3 COMP, PRECAST
SIC: 9999 NONCLASSIFIABLE ESTABLISHMENTS
RDS: RDS AREA: SQ FT

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	12		09/19/08
SAMPLE	00		
SELF-MONITOR	00		

ASSGN TO: LOMITA AREA OFFICE SECT: FIELD INSPECTION UNIT

==========

RESULTS: SB pH=6 ; 4-6" sludge, no floatables. Final 4" sludge, no floatables. Second 10-12" sludge, no floatables. Notice excessive

REMARKS: Solids.

INSPECTOR: Moises Delgadillo INSPECTION DATE: 8/5/08

DISP: Foll/mon

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

NOTICE

Date 9/9/08 File No. 10001-47197

To Scott Wakimura Permit No. 497447

Site Name Victoria Public Golf LLC Violation No. 584199

Site Address 340 E 192nd St, Carson

Mailing Address _____

Violation/Instructions

[ ] Excessive oil/grease/solids in the Industrial Waste Treatment Facilities
[ ] Rain Diversion System is not working properly
[ ] Discharging wastewater to ground, public, or private property
[ ] Industrial Waste Treatment Facilities are not built according to approved plans
[ ] Denied access to Inspector
[ ] You must submit a letter to this office outlining the steps that will correct the improper disposal of industrial waste and/or wastewater
[ ] You are required to pump the grease trap/interceptor and maintain the Industrial Waste Treatment Facility in proper working condition at all times
[ ] Other Have clarifier pumped - submit work order and/or waste manifest to Public Works by fax or mail to the address below

[ ] You are required to have the above violation(s) corrected by 9/24/08, and telephone the office shown below for a return inspection

If you have any questions regarding this matter, please contact Moises Delgadillo, Monday through Friday, 8 a.m to 9.30 a.m., at (310) 534-4862
(310) 326-8582 fax

Very truly yours,

Dean D. Efstathiou
Acting Director of Public Works

By Moises Delgadillo
Environmental Programs Division

Enc.

Address all correspondence to:

Los Angeles Co Dept of Public Works
Palos Verdes-Centinela Valley District
24320 South Narbonne Avenue
Lomita, CA 90717-1194

P:\eppubl\MUT\clerical\TEMPLATES\Viol Not Rev 09/05

L.A. COUNTY DPW
DATE COMPILED: 02/09/09
RUN DATE: 08/27/09 17:53:48

HAZARDOUS MATERIALS SYSTEM
IW INSPECTION JOB ORDER
SCHEDULED INSPECTIONS

REPORT: PWB150.001
INSP#: I000624164
ASSC#: P000497447
PAGE: 1

FILE #: 010001-047197
ADD: 340 E 192ND ST
CARSON, CA 90746
XSTREET: AVALON BLVD
CONTACT: BRIAN WHANG

NAME: VICTORIA PUBLIC GOLF LLC
AREA: 22 SMD: 95
THOMAS GUIDE: 0764-D3
TEL: 213 368 1444
AIN: 7339 017 902

PROC: STD SAMPLE REQUIRED? N

INSP INFO: CLARIFIER NEXT TO GOLF WASHING AREA

PERM TYPE: I 01 OPERATING PERMIT-LOCAL SEWER STATUS: PERMITTED
JURIS: C LOCAL ORDINANCE/CSDLAC EXEMPT
INDUSTRY: 212 SERVICE STATIONS--INCIDENTAL C
FACILITY: 4B 501-800 GAL, 3 COMP, PRECAST
SIC: 9999 NONCLASSIFIABLE ESTABLISHMENTS
RDS: RDS AREA: SQ FT

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	12		09/19/09
SAMPLE	00		
SELF-MONITOR	00		

ASSGN TO: LOMITA AREA OFFICE SECT: FIELD INSPECTION UNIT

RESULTS: CART. WASHING DONE IN DESIGNATED AREA UNDER PERM ROOF
3RD STAGE W/ SBR CLARIFIER LAST STAGE (3RD) ELBOW PRESENT
NO SLUDGE, SLIGHT FLOATABLES CDOP FIELD PH. 7-8 NO SOLIDS/FLOATABLES.

REMARKS: NO SOAP/DETERGENTS USED. RINSE OFF DIRT/GRASS FROM CARTS
ONLY.
CONSUM/ASSISTED BY GM. MEL MATSUKANE

INSPECTOR: Ramiro Y INSPECTION DATE: 9/10/09

DISP: Comp

10001 - 36358

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
900 South Fremont Ave.
Alhambra, California 91803-1331
Telephone: (626) 458-3520

Site ~~020417~~ File ~~035998~~
Application No ~~A306519~~ 317909
Permit 317910 ~~A306527~~
Area 22 Jurisdiction C
Thomas Guide Pg 764 D-3

APPLICATION FOR INDUSTRIAL WASTE DISPOSAL PERMIT

Check One:
[✓] New permit [ ] Permit Revision [ ] Change of Ownership (Efective Date / /) [ ] Non-use permit

PERMITTEE (OPERATOR) (Legal Company Name) VICTORIA GOLF L.L.C. ( ) Corporation ( ) Partnership ( ) Individual Tel. (310) 323-7308

LOCATION ADDRESS 340 E. 192ND ST. CARSON CA. 90746 (Street, City, State, Zip) Fax (310) 532-7690

MAILING ADDRESS 340 E. 192ND ST CARSON CA 90746 (Street, City, State, Zip)

TYPE OF INDUSTRY GOLF COURSE (General Description) (Federal SIC No.)

PROPERTY OWNER/ADDRESS COUNTY OF LOS ANGELES DEPT. OF PARK & RECREATION.

ASSESSORS PARCEL IDENTIFICATION: Map Book 8940 Page 378 Parcel # 059 (From tax bill)

NUMBER OF EMPLOYEES (Full Time) 10 (Part Time) 5 Lot Size (SQ. FT.) N/A.

GENERAL DESCRIPTION - Describe for each disposal method. Multiple disposal methods may require separate permits. Attach additional sheets if necessary. A minimum of four sets of engineered plans are required.

Method of disposal: [✓] Public sewer, [ ] Private underground disposal system, [ ] Surface waters, stream or storm drain, [ ] Haul to legal disposal point, [ ] Other (describe)

Raw materials used (attach MSDs where appropriate) N/A.

Products produced N/A.

Wastewater producing operations GOLF CART WASH

Constituents of waste discharge WATER

Number of employees 4 Hours of plant operation 7:00 AM/PM to 7:00 AM/PM Days per week M T W TH F Sa Su (Circle days)

Average daily wastewater flow rate (gal. per day) 400 Time of discharge 2 AM/PM to 7 AM/PM

Estimated five-minute peak wastewater flow rate (gal. per min.) 7.5 Days per week M T W TH F Sa Su (Circle days)

Indicate any daily, monthly, and seasonal variation, if any: N/A.

As a condition of the issuance of the permit herein applied for, the applicant agrees to submit additional information as may be required by the Director of Public Works. Permits may be subject to additional conditions and limitations. An inspection fee may be required upon permit issuance.

PERSON RESPONSIBLE FOR WASTE DISCHARGE:

NAME (Please print) TOM RUSSELL TITLE COURSE SUPERINTENDENT.
TELEPHONE (310) 323-4174

I AFFIRM THAT ALL INFORMATION FURNISHED IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE Michael S. Park DATE 12/6/00.

RETURN THIS APPLICATION, REQUIRED PLANS, SUPPORTING INFORMATION AND AN APPLICATION/PLAN REVIEW FEE OF $_____ PAYABLE TO:	LOS ANGELES COUNTY DEPT. OF PUBLIC WORKS ENVIRONMENTAL PROGRAMS DIVISION 900 South Fremont Ave., Alhambra, California 91803-1331

Complete Certification of Compliance with Los Angeles County Lobbyist Ordinance on back

IWDP-DPW.1 Rev/ 9/97

CERTIFICATION OF COMPLIANCE WITH LOS ANGELES COUNTY LOBBYIST ORDINANCE

This is to certify that I, as permit applicant, for the project located at _____
LOCATION ADDRESS

am familiar with the requirements of Los Angeles County Code Chapter 2.160 et seq., (relating to the Los Angeles County Lobbyist Ordinance) and that all persons acting on behalf of myself have complied and will continue to comply therewith through the application process.

Michael S. Parker. — APPLICANT (PRINT NAME)

Michael S. Parker — APPLICANT SIGNATURE

PARKWAY CONSTRUCTION. — COMPANY NAME (If employed by an entity/agency)

12/19/00 — DATE

INFORMATION REGARDING LOS ANGELES COUNTY CODE CHAPTER 2.160

The purpose of this handout is to provide a simplified explanation of Los Angeles County Code Chapter 2.160 so that individuals may become familiar with the County's Lobbyist Policy. This document is only intended to be used as a supplement to the County Ordinance.

Q. What is the purpose of the County Lobbyist Ordinance?

A. Prior to August 28,1992, the County did not regulate the activities of persons who lobby county officials. The Ordinance does not prohibit lobbying activities, but instead seeks to define a County Lobbyist and requires such individuals to register as such with the Board of Supervisors.

Q. Who does this Ordinance apply to?

A. This Ordinance applies to all persons applying for permits, licenses, contracts, franchises or grants from the County.

Q. What does this Ordinance require?

A. This Ordinance requires County Lobbyists to register with the Executive Officer of the Board of Supervisors. The initial registration must be filed within 20 days of first becoming a County Lobbyist. Renewals are to be filed within 20 days of the end of each calendar quarter. All applicants for a County permit, license, franchise or grant must certify that they are familiar with the requirements of Los Angeles County Code Chapter 2.160

Q. What constitutes a "County Lobbyist"?

A. County Lobbyist means any individual who is employed, contracts or otherwise receives compensation for influencing official action.

Q. What defines influencing "official action"?

A. Official action means the drafting, introduction, consideration, modification, enactment or defeat of any County Ordinance or Board of Supervisors motion or resolution, or the granting or denial of any County contract, permit, grant or license.

Q. Where can I find more information regarding this Ordinance?

A. A complete copy of the Ordinance is available for public review at all public counters in the Department of Public Works. Further information can be obtained by contacting:

Executive Office of the Board of Supervisors
500 West Temple Street
Los Angeles, CA 90012
(213) 974-1043

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
P. O. BOX 1460
ALHAMBRA, CA 91802-1460 TEL: (626) 458-3517

PERMIT NO: 00031791
EFFECTIVE DATE: 05/14/01
EXPIRATION DATE:

PERMISSION IS HEREBY GRANTED TO:

VICTORIA GOLF L.L.C. 340 E 192ND ST CARSON, CA 90746	<<<<< PERMITTEE	010001 036358 22 340 E 192ND ST TOM RUSSELL, SUPERINTENDENT (310) 323-4174	<<<<< FILE NUMBER/AREA <<<<< FACILITY ADDRESS <<<<< PRIMARY CONTACT <<<<< CONTACT PHONE

TO TREAT/STORE/DISPOSE INDUSTRIAL WASTE MATERIALS LOCATED AT THE FACILITY ABOVE UNDER THE SANITARY SEWER AND INDUSTRIAL WASTE ORDINANCE FOR:

CITY OF CARSON LOCAL ORDINANCE/CSDLAC EXEMPT	<<<<< AREA/CITY <<<<< JURISDICTION	MC, AVIII, C5, S8505 OCC AUTO REPR, CAR WASH, WASH DOWN	<<<<< ORDINANCE/MUN CO <<<<< INDUSTRY

THE INDUSTRIAL WASTE OPERATIONS REGULATED BY THIS PERMIT CONSIST OF THE FOLLOWING:

WASTE GENERATING OPERATIONS: CAR WASH
CONSTITUENTS: GREASY WATER WITH SUSPENDED SOILIDS
DISCHARGE TIME: FROM 19.00.00 TO 07.00.00 DISCHARGE DAYS: M TU W TH F SA SU
AVERAGE FLOW: 400 GAL PER DAY PEAK FLOW: 8 GAL PER MIN
FACILITY: 501-800 GAL, 3 COMP, PRECAST
SPEC INFO: CAR WASH FOR GOLF COURSE CARS ONLY L.A. COUNTY STANDARD WITH 510 GALLON CAPACITY

THIS PERMIT IS SUBJECT TO THE FOLLOWING REQUIRMENTS:

A1 COND & LIM, PUBLIC SEWER
B1 WASTES NOT AUTHORIZED, PUBLIC SEWER
C1 GENERAL CONDITIONS & LIMITATIONS
D1 EFFLUENT LIMITS, JOINT OUTFALL
S2 GAS STATION STORMWATER BMP POSTER

THE PLANS APPROVED IN CONJUNCTION WITH THIS PERMIT AND ANY PLANS REFERENCED HEREIN ARE MADE PART OF THIS PERMIT. THE INDUSTRIAL WASTE ENGINEERING INSPECTOR IN YOUR AREA WILL EXPLAIN THE PERMIT CONDITIONS, AND MAKE PERIODIC INSPECTIONS OF YOUR OPERATIONS. THIS PERMIT IS SUBJECT TO ANNUAL INDUSTRIAL WASTE INSPECTION FEES.

J. A. NOYES
DIRECTOR OF PUBLIC WORKS

BY: _____
ENVIRONMENTAL PROGRAMS DIVISION

DATE OF ISSUANCE: 05/22/01

38-003 DPW 12/86

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION
P. O. BOX 1460
ALHAMBRA, CA 91802-1460 TEL: (626) 458-3517

INDUSTRIAL WASTE DISPOSAL PERMIT

PERMIT NO: 0003179
EFFECTIVE DATE: 05/14/0
EXPIRATION DATE:

PERMISSION IS HEREBY GRANTED TO:

VICTORIA GOLF L.L.C. 340 E 192ND ST CARSON, CA 90746	<<<<< PERMITTEE	010001 036358 22 340 E 192ND ST TOM RUSSELL, SUPERINTENDENT (310) 323-4174	<<<<< FILE NUMBER/ARE <<<<< FACILITY ADDRES <<<<< PRIMARY CONTACT <<<<< CONTACT PHONE

TO TREAT/STORE/DISPOSE INDUSTRIAL WASTE MATERIALS LOCATED AT THE FACILITY ABOVE UNDER THE SANITARY SEWER AND INDUSTRIAL WASTE ORDINANCE FOR:

CITY OF CARSON LOCAL ORDINANCE/CSDLAC EXEMPT	<<<<< AREA/CITY <<<<< JURISDICTION	MC, AVIII, C5, S8505 OCC AUTO REPR, CAR WASH, WASH DOWN	<<<<< ORDINANCE/MUN C <<<<< INDUSTRY

POST THIS AT YOUR LOCATION

PERMIT

DUPLICATE BILL

VICTORIA GOLF L.L.C.
340 E 192ND ST
CARSON, CA 90746

PERMIT NO: P000317910
FILE NO: 010001 03635
AREA: 22
DATE: 05/22/01

PERMITTEE MAILING ADDRESS: VICTORIA GOLF L.L.C.
340 E 192ND ST
CARSON, CA 90746

RETURN TO: LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
CASHIER UNIT
P. O. BOX 1460
ALHAMBRA, CA 91802

MAKE CHECK PAYABLE TO: L.A. COUNTY DEPARTMENT OF PUBLIC WORKS

****
$123.00 *
* DUE DATE: 07/30/01 *
****

IND: 212 OCC AUTO REPR, CAR WASH, WASH JURIS: C LOCAL ORDINANCE/CSDLAC EXEMPT PERMIT TYPE: 01 OPERATING PERMIT-LOCAL SEWER

FEE TYPE	FEE DESCRIPTION	AMOUNT OWING	
112	ANNUAL PERMIT FEE	$123.00	
	TOTAL	$123.00	DUE DATE: 07/30/01

REFER ALL INQUIRES TO: L.A. COUNTY DEPARTMENT OF PUBLIC WORKS (626) 458-3517
* RETAIN THIS PORTION FOR YOUR RECORDS *

VICTORIA GOLF L.L.C.
340 E 192ND ST
CARSON, CA 90746

ANNUAL INDUSTRIAL WASTE INSPECTION FEE

DUPLICATE BILL

PERMIT NO: P000317910
FILE NO: 010001 0363
AREA: 22
DATE: 05/22/01

PERMITTEE MAILING ADDRESS: VICTORIA GOLF L.L.C.
340 E 192ND ST
CARSON, CA 90746

RETURN TO: LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
CASHIER UNIT
P. O. BOX 1460
ALHAMBRA, CA 91802

MAKE CHECK PAYABLE TO: L.A. COUNTY DEPARTMENT OF PUBLIC WORKS

****
$123.00 *
* DUE DATE: 07/30/01 *
****

REFER ALL INQUIRES TO: L.A. COUNTY DEPARTMENT OF PUBLIC WORKS (626) 458-3517
* RETURN THIS PORTION WITH PAYMENT *

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

Environmental Programs Division
P.O. Box 1460
Alhambra, CA 91802-1460

Permit No. 317910
File No. 010001-036358
Date JUN 11 2001

INDUSTRIAL WASTE DISPOSAL PERMIT CONDITIONS AND LIMITATIONS

Part A ON-SITE DISPOSAL - PUBLIC SEWER

1. Disposal of industrial wastewater to the public sanitary sewer system shall be limited to the flow indicated below:

   [X] a. Local Sewer. The maximum permitted peak flow rate to the sewer shall be 7.5 gallons per minute (gpm).

   [ ] b. Trunk Sewer. Maximum permitted daily flow to the sewer shall be no greater than 25% in excess of the Value on line 16 of the attached Permit for Industrial Wastewater Discharge.

2. Pretreatment, monitoring and control facilities required under this permit shall consist of the system(s) indicated below:

   [X] a. Sampling point prior to combining industrial wastewater flow with domestic wastewater.

   [X] b. Final gravity separator (clarifier) 510 gallon capacity, 3 stage.

   [ ] c. pH measurement and recording system.

   [ ] d. Automatic pH control.

   [ ] e. Flow measurement.

   [ ] f. Automatic rainwater diversion system with alarm capable of diverting storm flow in excess of the first 0.10 inch of rain from the sanitary sewer system.

   [ ] g. _____

3. Industrial wastewater shall at all times meet the following effluent quality limitations prior to discharge to the sanitary sewer system:

   [X] a. As specified in Part D -- Effluent Quality Limitations.

   [ ] b. Additional quality limitations: _____

4. The permittee shall submit the following periodic reports:

   [ ] a. Self-monitoring and/or industrial wastewater treatment surcharge reports as may be required by the Sanitation Districts of Los Angeles County. ***NOTE: These reports are to be submitted directly to the Sanitation Districts.***

   [ ] b. Self-monitoring compliance reports as described in Part E of this permit.

5. All required industrial wastewater collection, pretreatment, monitoring, disposal and sampling facilities must be installed in accordance with approved plans prior to initiating any discharge to the sewer system.

Conditions and Limitations (continued)

6. Discharge of any toxic, flammable, explosive, corrosive, radioactive or nonbiodegradable substance to the sanitary sewer is prohibited except as provided in **Part A.3** above.

7. Discharge of uncontaminated cooling water, groundwater, stormwater or surface drainage water to the sanitary sewer is prohibited except as specifically authorized by this permit.

8. Discharge of industrial wastewater to the sanitary sewer with temperatures exceeding 140 °F is prohibited.

9. This permit is subject to additional Conditions and Limitations attached:
   Part B -- Wastes Not Authorized for Discharge or Deposits in **Part A**
   Part C -- General Conditions and Limitations
   Part D -- Effluent Quality Limitations
   Part E -- Self -monitoring and Reporting (only if designated in **Part A.4.b**)

10. Other:

County of Los Angeles, Department of Public Works
Industrial Waste Disposal Permit

Part B - WASTES NOT AUTHORIZED FOR DISCHARGE OR DEPOSIT IN PART A

1. Industrial wastes not specifically authorized for on-site pretreatment, storage, deposit, discharge or disposal in Part A of this permit shall be stored in leakproof containers within an area designated on plans approved by the Department of Public Works pending transport to a legal point of disposal.

2. The permittee shall determine if industrial wastes stored pursuant to Part B.1 above are hazardous wastes as defined in the California Health and Safety Code, Chapter 6.5 and as determined by California Administrative Code, Title 22, Division 4, Chapter 30 and shall manage such wastes as prescribed therein.

3. Hazardous wastes shall only be removed from the premises under a Uniform Hazardous Waste Manifest unless a variance from such documentation has been granted by the California EPA Department of Toxic Substances Control (Cal EPA). Generator copies of the Uniform Hazardous Waste Manifest shall be maintained by the permittee for not less than 180 days or as directed by Cal EPA.

4. The permittee shall maintain records of the sources, quantity, name and address of hauler, date hauled, and point of legal disposal for nonhazardous industrial wastes and wastes granted a Cal EPA variance as described in Part B.3 above. Such records shall be kept a minimum of 180 days. A legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a California Regional Water Quality Control Board and which is in full compliance therewith or a facility authorized to receive such wastes by the jurisdiction(s) regulating the facility and is in full compliance with all permits, regulations and requirements.

5. Discharge of industrial wastewater to a channel, stormdrain, stream, river, lake, ocean or other surface waters is prohibited unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit issued by a California Regional Water Quality Control Board or the U.S. Environmental Protection Agency (EPA).

Los Angeles County Department of Public Works
Industrial Waste Disposal Permit

Part C - GENERAL CONDITIONS AND LIMITATIONS

1. A Copy of this permit shall be maintained on the premises where it will be available at all times to operating personnel.

2. Industrial waste pretreatment, storage and disposal operations shall be conducted in such a manner that no nuisances are created.

3. The permittee shall allow representatives of interested governmental agencies concerned with the disposal of industrial waste access at any reasonable time to take samples, inspect operations and review any records required by this permit.

4. The permittee shall secure written approval from this Department before making any additions or modifications which may affect the quantity, quality, or method of disposal of industrial waste materials. Requests or plans for additions or modifications to industrial waste treatment facilities or method of disposal shall be submitted for approval to the Department of Public Works, Environmental Programs Division, P.O. Box 1460, Alhambra, CA 91802-1460.

5. This permit is subject to suspension or revocation if conditions exist which would justify denial of a permit, if permittee fails to correct unsatisfactory conditions, if any of the Conditions an Limitations of this permit have been violated or if Annual Industrial Waste Inspection Fees, where required, are not paid within 90 days from date of notification.

6. The Director of Public Works may modify this permit by addition, revision, or elimination of conditions and limitations as may be necessary to accomplish the purpose of ordinances and laws covering disposal of waste materials.

7. The permit is valid only for the facility and location named thereon and is not transferable. In the event of any change of ownership, name or control of the industrial waste facilities subject to this permit, the permittee shall notify the Director of Public Works prior to the effective date of such change. Permittee shall also notify the succeeding owner or operator of the existence of this permit by letter, a copy of which shall be forwarded to the Director of Public Works. A new owner shall make application for an Industrial Waste Disposal Permit within 30 days from the date of assuming control of any facility subject to this permit.

8. Facilities subject to this permit shall not be abandoned. Cancellation of this permit may only be authorized pursuant to Los Angeles County Code Section 20.36.220.

COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC WORKS

INDUSTRIAL WASTE DISPOSAL PERMIT

Part D - EFFLUENT QUALITY LIMITATIONS - JOINT OUTFALL PERMIT

Constituents	Phase I Control Period Local Effluent Limits. (mg/L)*
Arsenic	3
Cadmium	15
Chromium (Total	10
Copper	15
Cyanide (Total)	10
Dissolved Sulfides	0.1
Lead	40
Mercury	2
Nickel	12
pH Range	Never lower than 6
Silver	5
Zinc	25
Floatable Oil & Grease	None visible
Temperature	140°F
Total Identifiable Chlorinated Hydrocarbons**	Essentially None

* - Maximum concentration at any time

** - Total Identifiable Chlorinated Hydrocarbons (TICH) comprise:
Aldrin and Dieldrin; Endrin and Toxaphene
Chlordane (cis & trans), trans-nonachlor, oxychlordane,
heptachlor and heptachlor epoxide
DDT and derivatives: P,P', and o, p' isomers of DDT, DDD,
and DDE
HCH: sum of α, β, γ, δ isomers of hexachlorocyclohexane
Polychlorinated biphenyls (PCB's)

DMN4/PARTD

Revised 12/19/95

L.A. COUNTY DPW — HAZARDOUS MATERIALS SYSTEM — REPORT: PWB150.001
DATE COMPILED: 06/25/99 — IW INSPECTION JOB ORDER — INSP#: I000377996
RUN DATE: 04/30/03 18:43:53 — SCHEDULED INSPECTIONS — ASSC#: P000317910
PAGE: 1

FILE #: 010001-036358 NAME: VICTORIA GOLF L.L.C.
ADD: 340 E 192ND ST
CARSON, CA 90746 AREA: 22 SMD: 95
XSTREET: AVALON BLVD THOMAS GUIDE: 0764-D3
CONTACT: TOM RUSSELL, SUPERINTENDENT TEL: 310 323 4174

PROC: STD SAMPLE REQUIRED? N

INSP INFO: CLARIFIER EAST OF GOLF CART WASHING AREA.

PERM TYPE: I 01 OPERATING PERMIT-LOCAL SEWER STATUS: PERMITTED
JURIS: C LOCAL ORDINANCE/CSDLAC EXEMPT
INDUSTRY: 212 OCC AUTO REPR, CAR WASH, WASH
FACILITY: 4B 501-800 GAL, 3 COMP, PRECAST
SIC: 9999 NONCLASSIFIABLE ESTABLISHMENTS
RDS: RDS AREA: SQ FT

	FREQUENCY	LAST PERFORMED	NEXT DUE
INSPECTION	12		05/14/03
SAMPLE	00		
SELF-MONITOR	00		

ASSGN TO: CENTINELA VALLEY FIELD OFFICE SECT: FIELD INSPECTION UNIT

==========

RESULTS: Approx 12" sludge, no floatables in 1st stage. 2nd, 3rd stages inaccessible. 1" sludge in S.B. Notice issued to pump clarifier.

REMARKS: Spoke to Chuck Glove No runoff observed.

INSPECTOR: Brad Kuwata INSPECTION DATE: 6/6/03

DISP: Follow / BK

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

NOTICE

Date: 6/6/03 File No.: 010001 - 036358

To: TOM RUSSELL Permit No.: 317910

Site Name: VICTORIA GOLF L.L.C. Violation No.: V383127

Site Address: 340 E. 192ND ST CARSON 90746 (AREA 22)

Mailing Address: SAME

Violation/Instructions:

[X] Excessive oil/grease/solids in the Industrial Waste Treatment Facilities.
[ ] Rain Diversion System is not working properly.
[ ] Discharging wastewater to ground, public, or private property.
[ ] Industrial Waste Treatment Facilities are not built according to approved plans.
[ ] Denied access to Inspector.
[ ] You must submit a letter to this office outlining the steps that will correct the improper disposal of industrial waste and/or wastewater.
[X] You are required to pump the grease trap/interceptor and maintain the Industrial Waste Treatment Facility in proper working condition at all times.
[X] Other: REMOVE THE BOLTS FROM 2ND, & 3RD STAGES OF CLARIFIER, ALL STAGES ARE TO BE ACCESSIBLE AT ALL TIMES.
[X] You are required to have the above violation(s) correction by 7/7/03 and telephone the office shown below for a return inspection.

If you have any questions regarding this matter, please contact BRAD KUWATA, Monday through Friday, 8 a.m. to 9:30 a.m., at (310) 534-4862.

Very truly yours,

JAMES A. NOYES
Director of Public Works

By: BK LA
Environmental Programs Division
BRAD KUWATA

Enc.

D Joe/Viol.Not
Revised 11/13/02

Address all correspondence to:

LA County, Department of Public Works
Environmental Programs Division
Palos Verdes-Centinela Valley / Lennox District
24320 South Narbonne Avenue
Lomita, CA 90717-1194

Preliminary

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
900 SOUTH FREMONT AVENUE, ALHAMBRA, CA 91803-1331

INDUSTRIAL WASTE PLAN CHECK INSTRUCTION SHEET

VICTORIA GOLF COURSE. _____
Facility Name

_____
I-File No.

340 E. 192ND ST. CARSON CA 90746.
Facility Address *Locality*

Michael Parker SAME.
Applicant or Engineer *Mailing Address*

THE APPLICATION AND PLANS YOU HAVE SUBMITTED FOR REVIEW ARE NOT APPROVED. SUBMIT, COMPLETE OR CORRECT THE ITEMS CIRCLED BELOW. RETURN THIS SHEET WITH REQUESTED MATERIAL.

1. Complete and sign the County Sanitation Districts Permit Application.
2. Complete and sign the County Industrial Waste Permit Application.
3. Complete and sign the City of _____ Permit Application.
4. Submit an application fee of $ 552 payable to the Los Angeles County ~~Engineer~~ Dept of Public Works.
5. Furnish chemical analyses and other data required on the attached County Sanitation Districts' Critical Parameter Report Form or Additional Information Questionnaire.
6. Place the name and address of the Company having the wastewater discharge at the lower right-hand corner of the plans.
7. Submit a plot plan drawn to scale showing acreage, adjacent streets and north arrow.
8. Provide a site drainage plan.
9. Provide a roof or an approved rainwater diversion system for all outside waste producing areas drained to the sewer.
10. Submit an industrial wastewater plumbing plan showing all floor drains, floor sinks, service sinks and waste lines and facilities for handling industrial wastewater from the point of origin to the connection to the public sewer. All equipment or facilities generating industrial wastewater must be identified on plans.
11. Separate sanitary wastes originating from rest rooms, lavatories, drinking fountains, etc., from industrial process wastewater until all industrial wastewater pretreatment or flow measuring steps are completed.
12. Submit scaled drawings for all wastewater pretreatment facilities.

OVER

13. Provide and show on plans a gravity separation interceptor of _____ gallon capacity with a sampling box on the downstream end.

14. Provide an automatic full-time total flow measurement system with flow indication, totalization, and recording and show on plans.

15. Provide a schematic mass balance flow diagram of the plant wastewater sources from water supply to wastewater discharge. Show water and wastewater flow rates, evaporation losses, losses to product, etc.

16. Provide a description of liquid waste materials leaving the plant other than in the industrial wastewater discharged to the sewer indicating types of materials and daily quantities.

17. Provide an automatic effluent pH control and recording system for acid wastes and show on plans.

18. Do not discharge one-pass cooling water to the public sewer.

19. The indicated rate of industrial waste discharge to the sewer is substantially higher than normally allocated for property of this size. Contact _____ at telephone _____ for the procedure necessary to obtain sewer capacity clearance.

20. Submit a plan showing outdoor storage tanks, spill containment details and cooling tower facilities.

21. Application(s), 4 sets of revised plans and supporting information must be returned to this office by _____. (One set of plans has been retained for reference.)

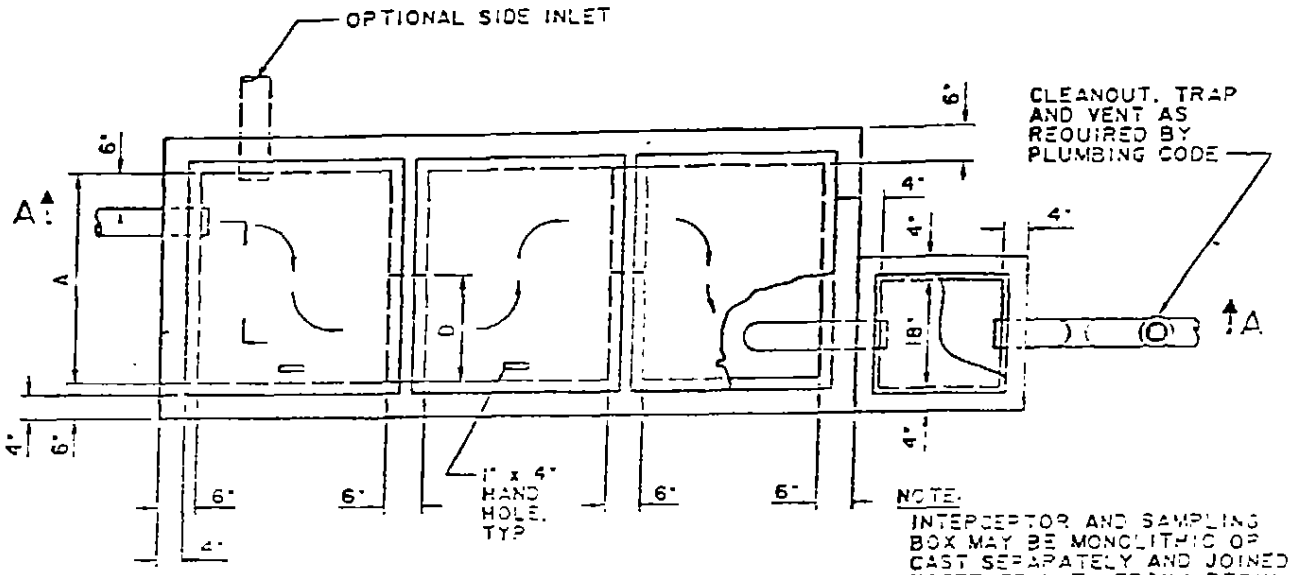
Checked by _____ Date _____ Telephone _____

ILR: 010001-009857 L.A. COUNTY DEPARTMENT OF PUBLIC WORKS RUN DATE: 12/19/00
REC: A000306519 FEE RECEIPT FOR RUN TIME: 10:41:45
NEW PERMIT W/PLANS (IW ONLY) RPT: PWC225

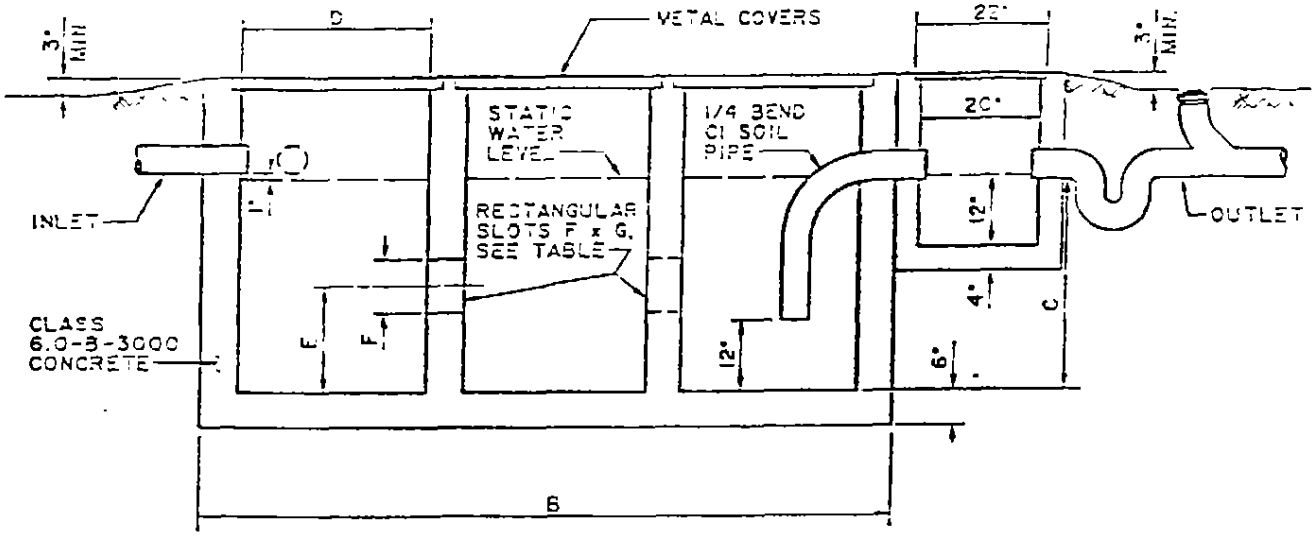
RECEIVED FROM: LA CO VICTORIA GOLF COURSE
ADDRESS: 340 E 192ND ST
CARSON, CA 90746

AMOUNT PAID: $592.00 PAYMENT TYPE: OVER THE COUNTER CHECKS
DATE PAID: 12/19/00 DEPOSIT DATE: 12/19/00
REF #: 001219999 PAYOR/COMMENTS: ARNOLD PALMER GOLF MANG/101085
RCPT #: 11002 AREA: CITY OF CARSON

RECEIVED BY: MASSIE-MUNROE



PLAN



SECTION A-A

CAPACITY GALLONS	DIMENSIONS							COVER SIZE	METAL COVERS	PIPE SIZE
	A	B	C	D	E	F	G			
510	3'-0"	9'-6"	3'-0"	2'-6"	18"	4 1/2"	18"	2'-10"x3'-4"	1/4" STEEL PLATE	4" MIN.
865	3'-6"	10'-3"	4'-0"	2'-9"	24"	6"	21"	3'-1"x3'-10"	3/8" ALUMINUM PLATE	4" MIN.
1250	4'-0"	12'-6"	4'-0"	3'-6"	24"	6"	24"	3'-10"x4'-4"	3/8" ALUMINUM PLATE	4" MIN.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

SAND & GREASE INTERCEPTOR

STANDARD PLAN
2041-0
SHEET 1 OF 2

APPROVED Thomas A. Gilmore 5/31/1992
DIRECTOR OF PUBLIC WORKS — DATE

SUPERSEDES COUNTY ENGINEER STD. 1-2

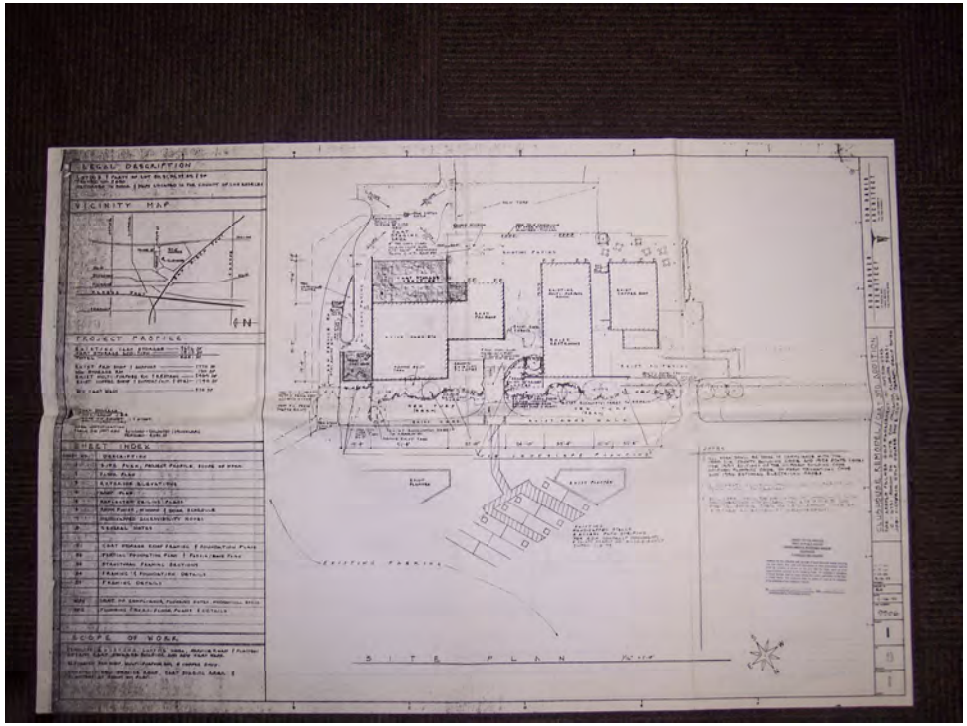
NOTES

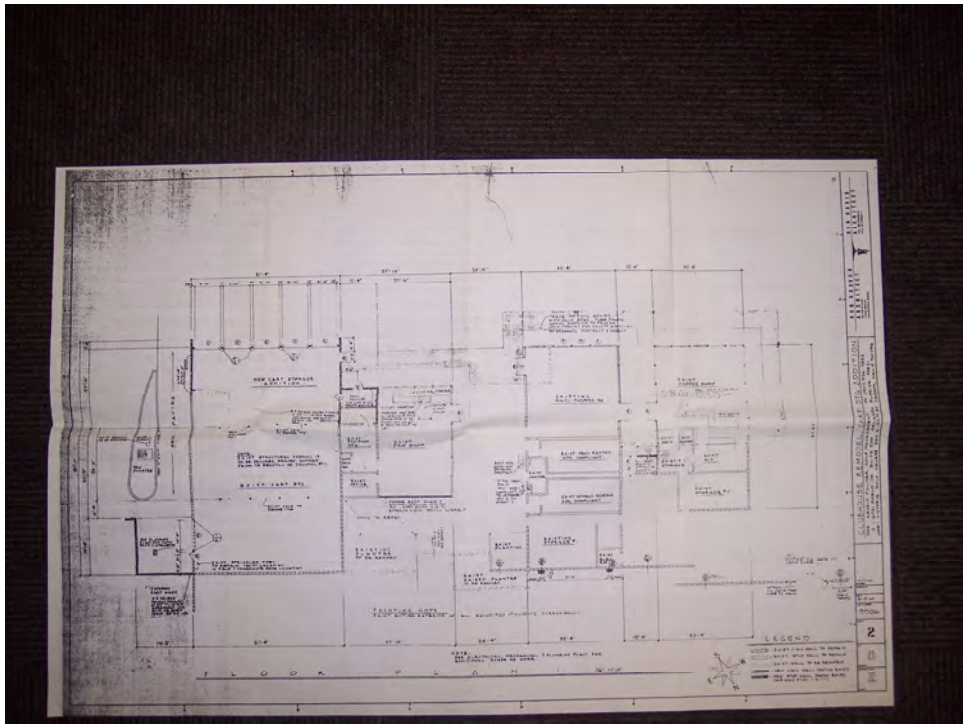
1. THE APPROVAL OF THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS MUST BE OBTAINED BEFORE INSTALLATION.
2. THE INTERCEPTOR IS TO BE CONSTRUCTED OF TYPE II PORTLAND CEMENT CONCRETE.
3. INTERCEPTOR EXCEEDING 6'-6" IN DEPTH MUST BE CONSTRUCTED OF REINFORCED CONCRETE.
4. IF INSTALLED INSIDE OF BUILDING THE TOP OF INTERCEPTOR MAY BE LEVEL WITH FLOOR PROVIDED THAT WASTES ENTER THROUGH INLET PIPE ONLY.
5. ALL SURFACE WATER MUST DRAIN AWAY FROM INTERCEPTOR TO EXCLUDE RAIN WATER TO PUBLIC SEWERS.
6. ALL PIPING SHALL BE CAST IRON
7. MANHOLE COVERS SHALL BE OF METAL.
8. STRUCTURE NOT FOR TRAFFIC LOADING.

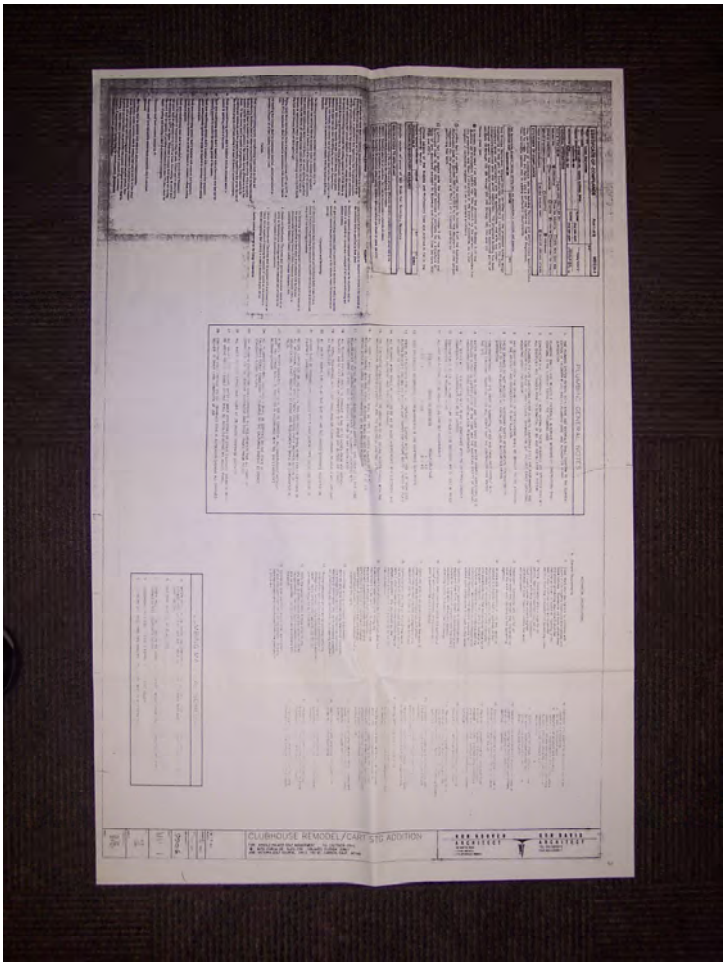
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

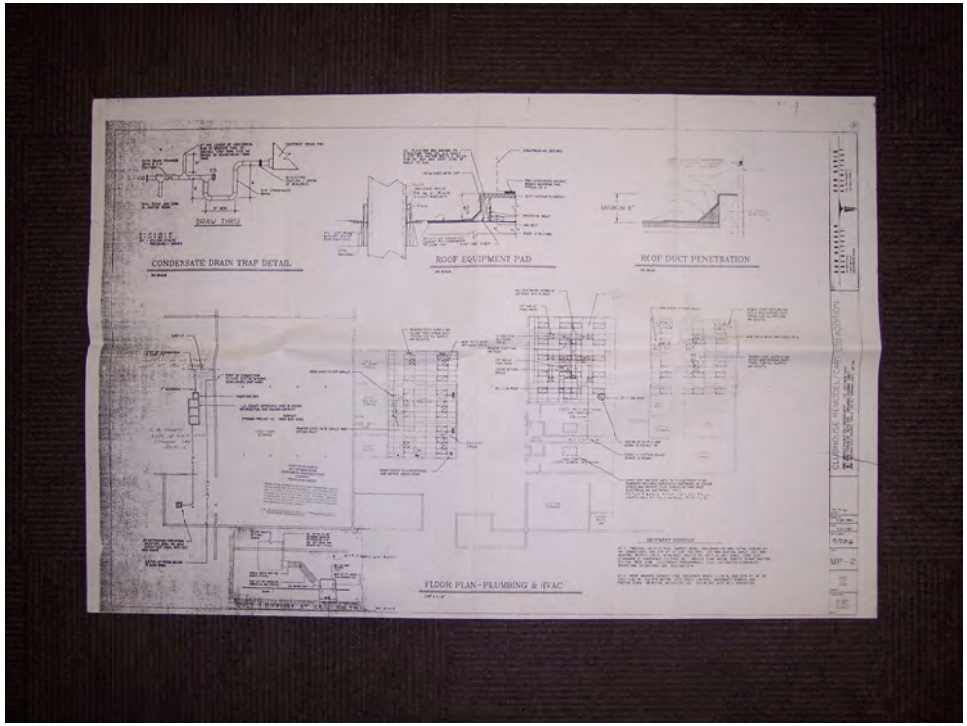
GREASE INTERCEPTOR

STANDARD PLAN
2046-0
SHEET 2 OF 2


LEGAL DESCRIPTION
VICINITY MAP
PROJECT PROFILE
SHEET INDEX
SCOPE OF WORK
SITE PLAN




CLUBHOUSE REMODEL/CART STG ADDITION


CONDENSATE DRAIN TRAP DETAIL
ROOF EQUIPMENT PAD
ROOF DUCT PENETRATION
FLOOR PLAN - PLUMBING & HVAC

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
Tel) 949-429-3564 • Fax) 949-429-3563
www.EnvironmentalSupportServices.com • Info@EnvironmentalSupportServices.com

May 30, 2018

Cal Fire
Office of the State Fire Marshal

Attention: Public Records Request

Subject: Records Search – Hazardous Materials/Waste/Underground Tanks/Pipelines

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

Dear Public Records Request,

Environmental Support Services (ESS) is in the process of conducting a records search for an environmental audit at a site in Carson, CA. This search includes researching the history of the site, especially as it pertains to hazardous materials/waste. With this in mind, **ESS** requests the following information concerning the subject address which your agency may have on file:

1. utilization, manufacture, storage, or discharge of hazardous materials/waste.
2. previous or on-going site investigations/remediations pertaining to hazardous materials/waste.
3. hazardous materials disclosures concerning the site.
4. pipelines.
5. information regarding underground storage tank present or previously found at the site.

Should you have any questions concerning this request for information, please call. Your expedient processing of this request is appreciated.

Sincerely,
Environmental Support Services

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

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Environmental Research & Due Diligence Compliance
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Should you have any questions concerning this request for information, please call. Your expedient processing of this request is appreciated.

Sincerely,
Environmental Support Services

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

Shannon Castagno

From: Request, PRA@CALFIRE <pra.request@fire.ca.gov>
Sent: Wednesday, June 6, 2018 9:32 AM
To: Shannon Castagno (Shannon@EnvironmentalSupportServices.com)
Subject: RE: 18-P-0488 FW: New Public Records Request
Attachments: 19200SMain_3Incident.pdf; 19200SMain_4Incident.pdf; 19200SMain_5Incident.pdf; 19200SMain_6Incident.pdf; 19200SMain_7Incident.pdf; 340E192nd_1Incident.pdf; 340E192nd_2Incident.pdf; 19200SMain_1Incident.pdf; 19200SMain_2Incident.pdf

Good Morning Shannon:

Thank you for your request noted below. Responsive records are attached.

Please note the Office of the State Fire Marshall, (OSFM), have provided the following information also:

The following Jurisdictional Pipelines are within 1,500ft of the property at 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street:
0026 – 1,100ft
0104 – 1,100ft
0150 – 1,100ft
0205 – 750ft
0263 – 1,100ft
0347 – 1,100ft
0454 – 1,100ft

And Abandoned Pipeline 0081 – 120ft from the property.

There are no Facilities, Breakout tanks or Incidents within 1,500ft of the property.

You may also visitthe CalEPA regulated site portal at https://siteportal.calepa.ca.gov/nsite/ to see if there is any information for the address.

Sincerely,

Anne Henigan
CAL FIRE Legal Office

From: Shannon Castagno [mailto:shannon@environmentalsupportservices.com]
Sent: Wednesday, May 30, 2018 6:22 PM
To: Request, PRA@CALFIRE <pra.request@fire.ca.gov>
Subject: New Public Records Request

Sorry, I forgot to attach the map.

Sincerely,
Shannon Castagno
Project Manager
Tel) 949-429-3564
Fax) 949-429-3563
http://EnvironmentalSupportServices.com

From: Shannon Castagno <shannon@environmentalsupportservices.com>
Sent: Wednesday, May 30, 2018 6:17 PM
To: 'Request, PRA@CALFIRE' <pra.request@fire.ca.gov>
Subject: New Public Records Request

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
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May 30, 2018

Cal Fire
Office of the State Fire Marshal

Attention: Public Records Request

Subject: Records Search – Hazardous Materials/Waste/Underground Tanks/Pipelines

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APN 7339-017-917
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1. utilization, manufacture, storage, or discharge of hazardous materials/waste.
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Should you have any questions concerning this request for information, please call. Your expedient processing of this request is appreciated.

Sincerely,
Environmental Support Services

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn E 192ND ST

C Incident Type

160 - Special outside fi

Incident Type

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

Type Aid Given or Recieved

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	10/11/2003			02:07:26		
Arrival	10/11/2003			02:12:51		
Controlled						
Last Unit Cleared	10/11/2003			02:41:19		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
C	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	10	32

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

900 - Outside or special property, other

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 2
Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

B Property Details

B1 Estimated number of residential living units in building of origin: 0

Not Residential: N

B2 Number of buildings involved:

B3 Acres burned (outside fires):

C On-Site Materials or Products

On-site materials: NNN - None

On-site materials use:

D Ignition

D1 Area of fire origin: 90 - Outside area, other

D2 Heat source: 74 - Other static discharge

D3 Item first ignited: UU - Undetermined

D4 Type of material first ignited:

Confined to object of origin:

E1 Cause of Ignition

Cause of ignition: 0 - Cause, other (conversion and

E2 Factors Contributing To Ignition

Factors contributing to ignition: NN - None

E3 Human Factors Contributing To Ignition

N - None

Estimated age of person involved:

Gender of person involved:

F1 Equipment Involved In Ignition

Equipment Involved:

Brand:

Model:

Serial #:

Year:

F2 Equipment Power

Equipment power source: UU - Undetermined

F3 Equipment Portability

Equipment portability: 1 - Portable

G Fire Suppression Factors

Fire suppression factors:

H1 Mobile Property Involved

Mobile property involved:

H2 Mobile Property Type & Make

Mobile property type:

Mobile property make:

Mobile property model:

Year:

License plate number:

State:

VIN number:

Local Use

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

NFIRS Remarks

Remarks

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				10/11/2003

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
124357	MARTIN ROMERO		1	10/11/2003

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID E116 Type 11	Dispatch 10/11/2003 02:07 Arrival 10/11/2003 02:16 Clear 10/11/2003 02:39	X	3	0 - Other	
2 ID E236 Type 11	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:13	X	4	0 - Other	
3 ID E36 Type 11	Dispatch 10/11/2003 02:07 Arrival Clear	X	4	0 - Other	
4 ID E10 Type 11	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:13	X	4	0 - Other	
5 ID E95 Type 11	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:13	X	4	0 - Other	
6 ID T116 Type 12	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:41	X	4	0 - Other	
7 ID LF127 Type 12	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:13	X	6	0 - Other	
8 ID S116 Type 76	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:38	X	2	0 - Other	
9 ID BC7 Type 91	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:13	X	0	0 - Other	
10 ID BC18 Type 91	Dispatch 10/11/2003 02:07 Arrival Clear 10/11/2003 02:13	X	1	0 - Other	
11 ID Type	Dispatch Arrival Clear				
12 ID Type	Dispatch Arrival Clear				
13 ID Type	Dispatch Arrival Clear				

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID E116 Type 11	Dispatch 10/11/2003 02:07:26 Arrival 10/11/2003 02:16:36 Clear 10/11/2003 02:39:17	Sent X	3 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
124357	ROMERO, MARTIN		X				
425376	TOMITA, GRANT		X				
430481	CHAVARRIE, MICHAEL		X				

2 ID E236 Type 11	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:13:11	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
183910	COBBS, RICHARD		X				
272073	WHITTLE, ANTHONY		X				
464178	SMITH, ROBERT		X				
488483	MONTGOMERY, JEREMY		X				

3 ID E36 Type 11	Dispatch 10/11/2003 02:07:26 Arrival Clear	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
242754	COGGINS, MICHAEL		X				
285173	PALMA, DANIEL		X				
476957	WOOD, KEITH		X				
481581	VALDORIA, RAMON		X				

NFIRS - 10 Personnel

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID E10 Type 11	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:13:08	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
272067	SCHNEIDER, PAUL		X				
442924	OATES, SHAUN		X				
486219	REID, RICHARD		X				
489710	GONZALES, ORLANDO		X				

2 ID E95 Type 11	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:13:15	Sent X	4 #	0 - Other			

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
272149	HASKELL, JEFF		X				
285172	MC KERNAN, CHRISTOPHE		X				
478433	MAHER, MARTIN		X				
488472	FLORES, RICK		X				

3 ID T116 Type 12	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:41:13	Sent X	4 #	0 - Other			

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
263415	HARNEY, DANIEL		X				
283708	MENDOZA, ROBERT		X				
428122	GARCIA, VICTOR		X				
476517	BUSH, ERIC		X				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 10/11/2003 | Station: 116 | Incident Number: 0209985 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: LF127 Type: 12	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:13:21	Sent X	6 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
219979	KATSUMATA, WILLIAM		X				
428124	MARCHANT, DENNIS		X				
438753	JOHNSON, BILLY		X				
481578	HOGELUND, HEATHER		X				
486206	FIDANI, MICHAEL		X				
486211	GUTIERREZ, JOHN		X				

2 ID: S116 Type: 76	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:38:59	Sent X	2 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
438740	COTA, DENNIS		X				
476691	NOTHERN, MICHAEL		X				

3 ID: BC7 Type: 91	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:13:37	Sent X	0 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/11/2003	116	0209985	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: BC18 Type: 91	Dispatch 10/11/2003 02:07:26 Arrival Clear 10/11/2003 02:13:24	X	1 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
476696	RICHARDSON,, DAVID		X				

2 ID: Type:	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID: Type:	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/15/2004	116	0236508	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract: 543400

Cross street or directions, as applicable: btwn E 192ND ST

C Incident Type

140 - Natural vegetation

D Aid Given or Received

Their FDID	Their State	Their Incident Number

Type Aid Given or Recieved: N - None

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	11	15	2004	22	41	03
Arrival	11	15	2004	22	46	05
Controlled	11	15	2004	23	27	30
Last Unit Cleared	11	15	2004	23	28	34

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
B	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	1	3

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

000 - Property Use, other

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 8 Wildland Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/15/2004	116	0236508	0

B Alternate Location Specification

Latitude: 33.8581
Longitude: 118.2755

OR

Township:
Range:
Section:
Subsection:
Meridian:

C Area Type

Area type: 3 - Rural/urban or suburban

D1 Wildland Fire Cause

Wildland fire cause: 4 - Open/outdoor fire

D2 Human Factors Contributing To Ignition

Human factors contributing to ignition:

D3 Factors Contributing To Ignition

Factors contributing to ignition:

D4 Fire Suppression Factors

Fire suppression factors:

E Heat Source

F Mobile Property Type

G Equipment Involved in Ignition

H Weather Information

NFDRS Weather Station ID:
Wind Direction:
Weather Type:
Wind speed MPH:
Air Temperature: F°
Relative Humidity: %
Fuel Moisture: %
Fire Danger Rating:

I1 Number of Buildings Ignited

Number of buildings that were ignited in Wildland fire:

I2 Number of Buildings Threatened

Number of buildings that were threatened by Wildland fire but were not involved:

I3 Total Acres Burned

0.21

I4 Primary Crops Burned

Crops Burned:

J Property Management

Ownership:

	% Total Acres Burned
Undetermined	%
Tax paying	%
Non tax paying	%
City, town, village, local	%
County or parish	%
State or province	%
Federal (Federal Agency Code)	%
Foreign	%
Military	%
Other	%

K NFDRS Fuel Model at Origin

Fuel Model:

L1 Person Responsible For Fire

Person Responsible for Fire:

L2 Gender of Person Involved

Gender of person involved:

L3 Age or Date of Birth

Age in Years:

OR

Date of Birth (Month Day Year):

L4 Activity of Person

Activity of Person Involved:

M Right of Way

Feet — Horizontal distance from right of way

Type of right of way:

N Fire Behavior

Elevation: Feet

Relative position on slope:

Aspect:

Flame Length: Feet

Rate of spread: Chains per Hour

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/15/2004	116	0236508	0

NFIRS Remarks

Remarks

COMPOST FIRE..EXTINGUISH W/ TANK WATER AND FOAM OWNER A/S (FREDRICO)

M

Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				11/16/2004

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
097779	MARK WILSON			11/16/2004

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/15/2004	116	0236508	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: E116 Type: 11	Dispatch: 11/15/2004 22:41 Arrival: Clear: 11/15/2004 23:27	X	3	0 - Other	11
2 ID: Type:	Dispatch: Arrival: Clear:				
3 ID: Type:	Dispatch: Arrival: Clear:				
4 ID: Type:	Dispatch: Arrival: Clear:				
5 ID: Type:	Dispatch: Arrival: Clear:				
6 ID: Type:	Dispatch: Arrival: Clear:				
7 ID: Type:	Dispatch: Arrival: Clear:				
8 ID: Type:	Dispatch: Arrival: Clear:				
9 ID: Type:	Dispatch: Arrival: Clear:				
10 ID: Type:	Dispatch: Arrival: Clear:				
11 ID: Type:	Dispatch: Arrival: Clear:				
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 11/15/2004 | Station: 116 | Incident Number: 0236508 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: E116 Type: 11	Dispatch 11/15/2004 22:41:03 Arrival Clear 11/15/2004 23:27:59	Sent: X	3 #	0 - Other	11

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
090757	THOMPSON, IAN		X				
097779	WILSON, MARK		X				
296753	APLANALP, MICHAEL		X				

2 ID:	Dispatch Arrival Clear	Sent	#		
Type:					

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID:	Dispatch Arrival Clear	Sent	#		
Type:					

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/23/2009	116	0241925	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn E 192ND ST

C Incident Type

142 - Brush, or brush an

Incident Type

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

Type Aid Given or Recieved

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	10/23/2009			22:51:06		
Arrival	10/23/2009			22:55:57		
Controlled	10/23/2009			23:40		
Last Unit Cleared	10/23/2009			23:44:57		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
B	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	1	3

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

807 - Outside material storage area

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 8 Wildland Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/23/2009	116	0241925	0

B Alternate Location Specification

Latitude: 33.8581
Longitude: 118.2755

OR

Township:
Range:
Section:
Subsection:
Meridian:

C Area Type

Area type: 2 - Urban, heavily populated

D1 Wildland Fire Cause

Wildland fire cause: 5 - Debris, vegetation burn

D2 Human Factors Contributing To Ignition

Human factors contributing to ignition:

D3 Factors Contributing To Ignition

Factors contributing to ignition:

D4 Fire Suppression Factors

Fire suppression factors:

E Heat Source

F Mobile Property Type

G Equipment Involved in Ignition

H Weather Information

NFDRS Weather Station ID:
Wind Direction:
Weather Type:
Wind speed MPH:
Air Temperature: F°
Relative Humidity: %
Fuel Moisture: %
Fire Danger Rating:

I1 Number of Buildings Ignited

Number of buildings that were ignited in Wildland fire:

I2 Number of Buildings Threatened

Number of buildings that were threatened by Wildland fire but were not involved:

I3 Total Acres Burned

0.11

I4 Primary Crops Burned

Crops Burned:

J Property Management

Ownership:

	% Total Acres Burned
Undetermined	%
Tax paying	%
Non tax paying	%
City, town, village, local	%
County or parish	%
State or province	%
Federal (Federal Agency Code)	%
Foreign	%
Military	%
Other	%

K NFDRS Fuel Model at Origin

Fuel Model:

L1 Person Responsible For Fire

Person Responsible for Fire:

L2 Gender of Person Involved

Gender of person involved:

L3 Age or Date of Birth

Age in Years:

OR

Date of Birth (Month Day Year):

L4 Activity of Person

Activity of Person Involved:

M Right of Way

Feet — Horizontal distance from right of way:

Type of right of way:

N Fire Behavior

Elevation: Feet

Relative position on slope:

Aspect:

Flame Length: Feet

Rate of spread: Chains per Hour

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/23/2009	116	0241925	0

NFIRS Remarks

Remarks

Incident Narrative At 2251 hours on Friday, October 23, 2009 we were dispatched to a brush, or brush and grass mixture fire. One unit was assigned to this incident. Three personnel responded. We arrived on scene at 2255 hours and cleared at 2344 hours. The incident occurred at 19200 S MAIN St CARSON CA. The local station is 116. The general description of this property is outside material storage area. Null2. The primary task(s) performed at the scene by responding personnel was extinguishment. No mutual/automatic aid was given or received. The cause of ignition was from a debris/vegetation burn. Alarm number 0241925 has been assigned to this incident. Unit Narrative At 2251 hours on Friday, October 23, 2009 Unit E116 was dispatched to a brush, or brush and grass mixture fire. Three personnel responded. We arrived on scene at 2255 hours and cleared at 2344 hours. MULCH FIRE EXTINGUISHED THEN TURNED OVER BY OWNERS WITH A DOZER

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				10/24/2009

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
450538	RORY BRUNNER			10/24/2009

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/23/2009	116	0241925	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: E116 Type: 11	Dispatch: 10/23/2009 22:51 Arrival: Clear: 10/23/2009 23:44	X	3	0 - Other	
2 ID: Type:	Dispatch: Arrival: Clear:				
3 ID: Type:	Dispatch: Arrival: Clear:				
4 ID: Type:	Dispatch: Arrival: Clear:				
5 ID: Type:	Dispatch: Arrival: Clear:				
6 ID: Type:	Dispatch: Arrival: Clear:				
7 ID: Type:	Dispatch: Arrival: Clear:				
8 ID: Type:	Dispatch: Arrival: Clear:				
9 ID: Type:	Dispatch: Arrival: Clear:				
10 ID: Type:	Dispatch: Arrival: Clear:				
11 ID: Type:	Dispatch: Arrival: Clear:				
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	10/23/2009	116	0241925	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID E116 Type 11	Dispatch 10/23/2009 22:51:06 Arrival Clear 10/23/2009 23:44:51	X	3 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
428122	GARCIA, VICTOR		X				
450538	BRUNNER, RORY		X				
520159	LOOMIS, BRIAN		X				

2 ID Type	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID Type	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/20/2013	116	0307548	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn E 192ND ST

C Incident Type

150 - Outside rubbish fi

Incident Type

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

Type Aid Given or Recieved

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	12	20	2013	03	07	33
Arrival	12	20	2013	03	22	10
Controlled						
Last Unit Cleared	12	20	2013	03	47	21

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
A	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	1	3

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

500 - Mercantile, business, other

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/20/2013	116	0307548	0

NFIRS Remarks

Remarks

E116 UTILIZED REEL LINE AND APROX. 500 GALLONS OF FOAM SOLUTION TO EXTIGUISH COMPOST PILE FIRE WITHIN NURSERY. NO $ LOSS

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				12/24/2013

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
263396	STEVEN SHOOK		1	12/24/2013

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/20/2013	116	0307548	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: E116 Type: 11	Dispatch: 12/20/2013 03:07 Arrival: Clear: 12/20/2013 03:47	X	3	0 - Other	32
2 ID: Type:	Dispatch: Arrival: Clear:				
3 ID: Type:	Dispatch: Arrival: Clear:				
4 ID: Type:	Dispatch: Arrival: Clear:				
5 ID: Type:	Dispatch: Arrival: Clear:				
6 ID: Type:	Dispatch: Arrival: Clear:				
7 ID: Type:	Dispatch: Arrival: Clear:				
8 ID: Type:	Dispatch: Arrival: Clear:				
9 ID: Type:	Dispatch: Arrival: Clear:				
10 ID: Type:	Dispatch: Arrival: Clear:				
11 ID: Type:	Dispatch: Arrival: Clear:				
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 12/20/2013 | Station: 116 | Incident Number: 0307548 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: E116 Type: 11	Dispatch 12/20/2013 03:07:33 Arrival Clear 12/20/2013 03:47:06	Sent: X	3 #	0 - Other	32

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
263396	SHOOK, STEVEN		X				
272149	HASKELL, JEFF		X				
489725	GUTIERREZ, FRANK		X				

2 ID:	Dispatch Arrival Clear	Sent	#		
Type:					

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID:	Dispatch Arrival Clear	Sent	#		
Type:					

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/23/2012	116	0305894	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn E 192ND ST

C Incident Type

150 - Outside rubbish fi

Incident Type

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

Type Aid Given or Recieved

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	12/23/2012			06:14:50		
Arrival	12/23/2012			06:18:01		
Controlled						
Last Unit Cleared	12/23/2012			07:16:58		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
A	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	4	15

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

800 - Storage, other

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/23/2012	116	0305894	0

NFIRS Remarks

Remarks

Incident Narrative At 0614 hours on Sunday, December 23, 2012 we were dispatched to an outside rubbish fire. Four units were assigned to this incident. Fifteen personnel responded. We arrived on scene at 0618 hours and cleared at 0716 hours. The incident occurred at 19200 S MAIN St CARSON CA. The local station is 116. The general description of this property is storage. The primary task(s) performed at the scene by responding personnel was extinguishment. No mutual/automatic aid was given or received. Alarm number 0305894 has been assigned to this incident. Unit Narrative At 0615 hours on Sunday, December 23, 2012 Unit E116. Three personnel responded. We arrived on scene at 0618 hours and cleared at 0715 hours. COMPOST FIRE BEING EXTINGUISHED WITH THE HELP OF THE OCCUPANTS DOZER AND HOUSE LINES.

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				12/23/2012

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
450538	RORY BRUNNER			12/23/2012

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/23/2012	116	0305894	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: 0116 Type: 13	Dispatch: 12/23/2012 06:14 Arrival: Clear:	X	4	0 - Other	
2 ID: E116 Type: 11	Dispatch: 12/23/2012 06:15 Arrival: Clear: 12/23/2012 07:15	X	3	0 - Other	
3 ID: E236 Type: 11	Dispatch: 12/23/2012 06:23 Arrival: 12/23/2012 06:31 Clear: 12/23/2012 07:04	X	4	0 - Other	
4 ID: E36 Type: 11	Dispatch: 12/23/2012 06:23 Arrival: 12/23/2012 06:33 Clear: 12/23/2012 07:03	X	4	0 - Other	
5 ID: Type:	Dispatch: Arrival: Clear:				
6 ID: Type:	Dispatch: Arrival: Clear:				
7 ID: Type:	Dispatch: Arrival: Clear:				
8 ID: Type:	Dispatch: Arrival: Clear:				
9 ID: Type:	Dispatch: Arrival: Clear:				
10 ID: Type:	Dispatch: Arrival: Clear:				
11 ID: Type:	Dispatch: Arrival: Clear:				
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

NFIRS - 10 Personnel

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/23/2012	116	0305894	0

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID Q116 Type 13	Dispatch 12/23/2012 06:14:50 Arrival Clear	X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
217247	MARTINEZ, DAVID		X				
263435	FUJINO, STUART		X				
450518	MONROE, MICHAEL		X				
510161	PEINADO, JOSEPH		X				

		Sent [X]	Number of People	Use	Actions Taken
2 ID E116 Type 11	Dispatch 12/23/2012 06:15:17 Arrival Clear 12/23/2012 07:15:26	X	3 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
418269	CANNIZZARO, MICHAEL		X				
450538	BRUNNER, RORY		X				
545821	CODY, TIMOTHY		X				

		Sent [X]	Number of People	Use	Actions Taken
3 ID E236 Type 11	Dispatch 12/23/2012 06:23:56 Arrival 12/23/2012 06:31:50 Clear 12/23/2012 07:04:45	X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
284863	BARRETT, JEANE		X				
464146	AUDET, BRIAN		X				
539583	GRUNBAUM, GRANT		X				
550385	MANUS, JOHN		X				

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/23/2012	116	0305894	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID E36 Type 11	Dispatch 12/23/2012 06:23:56 Arrival 12/23/2012 06:33:14 Clear 12/23/2012 07:03:55	X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
418262	GOODRICH, ERIC		X				
477071	PACHECO, ALEX		X				
502681	MACK, DAVID		X				
520159	LOOMIS, BRIAN		X				

2 ID Type	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID Type	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

NFIRS - 1 Basic

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract: 543400

Cross street or directions, as applicable: btwn E 192ND ST

C Incident Type

160 - Special outside fi

D Aid Given or Received

Their FDID	Their State	Their Incident Number

Type Aid Given or Recieved: N - None

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	11/26/2015			04:55:06		
Arrival	11/26/2015			04:59:10		
Controlled						
Last Unit Cleared	11/26/2015			05:25:52		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
A	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	11	34

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

800 - Storage, other

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 2
Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

B Property Details

B1 — 0 — N — Not Residential
Estimated number of residential living units in building of origin

B2 — Number of buildings involved

B3 — Acres burned (outside fires)

C On-Site Materials or Products

On-site materials: 000 - On-site materials, other

On-site materials use: 1 - Bulk storage or warehousing

D Ignition

D1 — 00 - Other
Area of fire origin

D2 — UU - Undetermined
Heat source

D3 — UU - Undetermined
Item first ignited

D4 — Type of material first ignited

Confined to object of origin

E1 Cause of Ignition

0 - Cause, other (conversion and
Cause of ignition

E2 Factors Contributing To Ignition

NN - None
Factors contributing to ignition

E3 Human Factors Contributing To Ignition

N - None

Estimated age of person involved

Gender of person involved

F1 Equipment Involved In Ignition

Equipment Involved

Brand

Model

Serial #

Year

F2 Equipment Power

40 - Solid fuel, other
Equipment power source

F3 Equipment Portability

2 - Stationary
Equipment portability

G Fire Suppression Factors

Fire suppression factors

H1 Mobile Property Involved

Mobile property involved

H2 Mobile Property Type & Make

Mobile property type

Mobile property make

Mobile property model

Year

License plate number

State

VIN number

Local Use

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

NFIRS Remarks

Remarks

Incident Narrative At 0455 hours on Thursday, November 26, 2015 we were dispatched to special outside fire. Eleven units were assigned to this incident. Thirty-four personnel responded. We arrived on scene at 0459 hours and cleared at 0525 hours. The incident occurred at 19200 S MAIN St CARSON CA. The local station is 116. The general description of this property is storage. The primary task(s) performed at the scene by responding personnel was extinguishment. No mutual/automatic aid was given or received. The estimated property loss on this incident was $0.00. The estimated content loss was $0.00. Alarm number 0331496 has been assigned to this incident. mulch fire. Unit Narrative At 0455 hours on Thursday, November 26, 2015 Unit E116. Five personnel responded. We arrived on scene at 0459 hours and cleared at 0525 hours.

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				11/26/2015

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
450536	DAVID HALEY			11/26/2015

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: 0116 Type: 13	Dispatch: 11/26/2015 04:55 Arrival: 11/26/2015 04:59 Clear: 11/26/2015 05:07	X	4	0 - Other	
2 ID: LF127 Type: 12	Dispatch: 11/26/2015 04:55 Arrival: Clear: 11/26/2015 05:04	X	6	0 - Other	
3 ID: E116 Type: 11	Dispatch: 11/26/2015 04:55 Arrival: Clear: 11/26/2015 05:25	X	5	0 - Other	
4 ID: E236 Type: 11	Dispatch: 11/26/2015 04:55 Arrival: 11/26/2015 05:01 Clear: 11/26/2015 05:14	X	4	0 - Other	
5 ID: E36 Type: 11	Dispatch: 11/26/2015 04:55 Arrival: 11/26/2015 05:01 Clear: 11/26/2015 05:04	X	4	0 - Other	
6 ID: E10 Type: 11	Dispatch: 11/26/2015 04:55 Arrival: 11/26/2015 05:01 Clear: 11/26/2015 05:04	X	4	0 - Other	
7 ID: E95 Type: 11	Dispatch: 11/26/2015 04:55 Arrival: 11/26/2015 05:02 Clear: 11/26/2015 05:04	X	4	0 - Other	
8 ID: S116 Type: 76	Dispatch: 11/26/2015 04:55 Arrival: Clear: 11/26/2015 05:04	X	0	0 - Other	
9 ID: BC7 Type: 91	Dispatch: 11/26/2015 04:55 Arrival: Clear: 11/26/2015 05:05	X	1	0 - Other	
10 ID: BC18 Type: 91	Dispatch: 11/26/2015 04:55 Arrival: Clear: 11/26/2015 05:04	X	1	0 - Other	
11 ID: F10 Type: 10	Dispatch: 11/26/2015 04:56 Arrival: Clear: 11/26/2015 05:04	X	1	0 - Other	
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID Q116 Type 13	Dispatch 11/26/2015 04:55:06 Arrival 11/26/2015 04:59:40 Clear 11/26/2015 05:07:10	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
263396	SHOOK, STEVEN		X				
272149	HASKELL, JEFF		X				
533520	DRUDE, GREGORY		X				
601727	GUERRERO, HENRY		X				

2 ID LF127 Type 12	Dispatch 11/26/2015 04:55:06 Arrival Clear 11/26/2015 05:04:17	Sent X	6 #	0 - Other

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
402180	GIFFORD, ROBERT		X				
438733	BURDEN, JOEL		X				
520184	SCHUTTE, JOSHUA		X				
530296	MCANDREWS, TRAVIS		X				
536491	SANCHEZ, RUBEN		X				
601776	SONG, HENRY		X				

3 ID E116 Type 11	Dispatch 11/26/2015 04:55:06 Arrival Clear 11/26/2015 05:25:47	Sent X	5 #	0 - Other

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
418269	CANNIZZARO, MICHAEL		X				
450536	HALEY, DAVID		X				
477066	CISNEROS, MICHAEL		X				
489725	GUTIERREZ, FRANK		X				
520197	VIDOVICH, ANDREW		X				

A	19110	CA	11/26/2015	116	0331496	0	NFIRS - 10 Personnel
	FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure	

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent X	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID E236 Type 11	Dispatch 11/26/2015 04:55:06 Arrival 11/26/2015 05:01:09 Clear 11/26/2015 05:14:58	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend X	Action Taken	Action Taken	Action Taken	Action Taken
451309	CHOI, MARC		X				
499164	GARST, FRANK		X				
510161	PEINADO, JOSEPH		X				
526619	LUTSKI, ADAM		X				

2 ID E36 Type 11	Dispatch 11/26/2015 04:55:06 Arrival 11/26/2015 05:01:43 Clear 11/26/2015 05:04:31	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend X	Action Taken	Action Taken	Action Taken	Action Taken
223737	KING, OLIVER		X				
410581	WEAVER, ROBERT		X				
548759	MENDOZA, JOSE		X				
607147	SWAN, THOMAS		X				

3 ID E10 Type 11	Dispatch 11/26/2015 04:55:06 Arrival 11/26/2015 05:01:58 Clear 11/26/2015 05:04:24	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend X	Action Taken	Action Taken	Action Taken	Action Taken
219676	MILLS, DEREK		X				
416534	GRAHAM, GARY		X				
609861	MEYERS, IAN		X				
613399	GONZALEZ, MICHAEL		X				

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID E95 Type 11	Dispatch 11/26/2015 04:55:06 Arrival 11/26/2015 05:02:08 Clear 11/26/2015 05:04:17	Sent X	4 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
296759	GOMEZ, TODD		X				
523683	MORALES, HARRY		X				
545017	THOMPSON, THOMAS		X				
613415	SMITH, CHRISTOPHER		X				

2 ID S116 Type 76	Dispatch 11/26/2015 04:55:06 Arrival Clear 11/26/2015 05:04:27	Sent X	0 #	0 - Other

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID BC7 Type 91	Dispatch 11/26/2015 04:55:06 Arrival Clear 11/26/2015 05:05:36	Sent X	1 #	0 - Other

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
272127	SCHAEFER, KURT		X				

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	11/26/2015	116	0331496	0

NFIRS - 10 Personnel

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: BC18 Type: 91	Dispatch: 11/26/2015 04:55:06 Arrival: Clear: 11/26/2015 05:04:23	X	1 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
226621	ASKARI, BRIAN		X				

2 ID: F10 Type: 10	Dispatch: 11/26/2015 04:56:46 Arrival: Clear: 11/26/2015 05:04:43	Sent X	1 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
486219	REID, RICHARD		X				

3 ID: Type:	Dispatch: Arrival: Clear:	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	01/15/2016	116	0014589	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	19200	South	MAIN		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn E 192ND ST

C Incident Type

100 - Fire, other

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	01/15/2016			00:23:06		
Arrival	01/15/2016			00:30:03		
Controlled	01/15/2016			01:00		
Last Unit Cleared	01/15/2016			01:07:20		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
A	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	1	3

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

U - Unknown

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

931 - Open land or field

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 2
Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	01/15/2016	116	0014589	0

B Property Details

B1 Estimated number of residential living units in building of origin: 0

Not Residential: N

B2 Number of buildings involved:

B3 Acres burned (outside fires):

C On-Site Materials or Products

On-site materials: NNN - None

On-site materials use:

D Ignition

D1 Area of fire origin: UU - Undetermined

D2 Heat source: 72 - Chemical reaction

D3 Item first ignited: UU - Undetermined

D4 Type of material first ignited:

Confined to object of origin:

E1 Cause of Ignition

Cause of ignition: 2 - Unintentional

E2 Factors Contributing To Ignition

Factors contributing to ignition: 60 - Natural condition, other

E3 Human Factors Contributing To Ignition

N - None

Estimated age of person involved:

Gender of person involved:

F1 Equipment Involved In Ignition

Equipment Involved: NNN - None

Brand:

Model:

Serial #:

Year:

F2 Equipment Power

Equipment power source:

F3 Equipment Portability

Equipment portability:

G Fire Suppression Factors

Fire suppression factors:

H1 Mobile Property Involved

Mobile property involved:

H2 Mobile Property Type & Make

Mobile property type:

Mobile property make:

Mobile property model:

Year:

License plate number:

State:

VIN number:

Local Use

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	01/15/2016	116	0014589	0

NFIRS Remarks

Remarks

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				01/15/2016

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
425376	GRANT TOMITA			01/15/2016

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	01/15/2016	116	0014589	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: E116 Type: 11	Dispatch: 01/15/2016 00:23 Arrival: Clear: 01/15/2016 01:06	X	3	0 - Other	
2 ID: Type:	Dispatch: Arrival: Clear:				
3 ID: Type:	Dispatch: Arrival: Clear:				
4 ID: Type:	Dispatch: Arrival: Clear:				
5 ID: Type:	Dispatch: Arrival: Clear:				
6 ID: Type:	Dispatch: Arrival: Clear:				
7 ID: Type:	Dispatch: Arrival: Clear:				
8 ID: Type:	Dispatch: Arrival: Clear:				
9 ID: Type:	Dispatch: Arrival: Clear:				
10 ID: Type:	Dispatch: Arrival: Clear:				
11 ID: Type:	Dispatch: Arrival: Clear:				
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 01/15/2016 | Station: 116 | Incident Number: 0014589 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: E116 Type: 11	Dispatch 01/15/2016 00:23:06 Arrival Clear 01/15/2016 01:06:56	X	3 #	0 - Other	

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
272149	HASKELL, JEFF		X				
425376	TOMITA, GRANT		X				
533520	DRUDE, GREGORY		X				

2 ID: Type:	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID: Type:	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	06/03/2012	116	0130184	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	340	East	192ND		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn S MAIN ST

C Incident Type

140 - Natural vegetation

Incident Type

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

Type Aid Given or Recieved

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	06/03/2012			18:23:28		
Arrival	06/03/2012			18:28:43		
Controlled	06/03/2012			19:05		
Last Unit Cleared	06/03/2012			19:23:12		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
A	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish
12 - Salvage & overhaul

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	1	3

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 0

PRE-INCIDENT VALUE: Optional

Property	$
Contents	$

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

900 - Outside or special property, other

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 8 Wildland Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	06/03/2012	116	0130184	0

B Alternate Location Specification

Latitude: 33.8573
Longitude: 118.2706

OR

Township:
Range:
Section:
Subsection:
Meridian:

C Area Type

Area type: 3 - Rural/urban or suburban

D1 Wildland Fire Cause

Wildland fire cause: 3 - Smoking

D2 Human Factors Contributing To Ignition

Human factors contributing to ignition:

D3 Factors Contributing To Ignition

Factors contributing to ignition:

D4 Fire Suppression Factors

Fire suppression factors:

E Heat Source

F Mobile Property Type

G Equipment Involved in Ignition

H Weather Information

NFDRS Weather Station ID:
Wind Direction:
Weather Type:
Wind speed MPH:
Air Temperature: F°
Relative Humidity: %
Fuel Moisture: %
Fire Danger Rating:

I1 Number of Buildings Ignited

Number of buildings that were ignited in Wildland fire:

I2 Number of Buildings Threatened

Number of buildings that were threatened by Wildland fire but were not involved:

I3 Total Acres Burned

0.21

I4 Primary Crops Burned

Crops Burned:

J Property Management

Ownership:

	% Total Acres Burned
Undetermined	%
Tax paying	%
Non tax paying	%
City, town, village, local	%
County or parish	%
State or province	%
Federal (Federal Agency Code)	%
Foreign	%
Military	%
Other	%

K NFDRS Fuel Model at Origin

Fuel Model:

L1 Person Responsible For Fire

Person Responsible for Fire:

L2 Gender of Person Involved

Gender of person involved:

L3 Age or Date of Birth

Age in Years:
OR
Date of Birth (Month Day Year):

L4 Activity of Person

Activity of Person Involved:

M Right of Way

Feet — Horizontal distance from right of way:
Type of right of way:

N Fire Behavior

Elevation: Feet
Relative position on slope:
Aspect:
Flame Length: Feet
Rate of spread: Chains per Hour

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	06/03/2012	116	0130184	0

NFIRS Remarks

Remarks

E116 UTILIZED 500 GALLONS OF FOAM SOLUTION THROUGH REEL LINE TO EXTINGUISH GASS AND TREE FIRE WITHIN PUBLIC GOLF COURSE. PROBABLE CAUSE DISCARDED SMOKING MATERIAL. NO $ LOSS NO INJURIES.

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				06/04/2012

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
263396	STEVEN SHOOK		1	06/04/2012

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	06/03/2012	116	0130184	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: E116 Type: 11	Dispatch: 06/03/2012 18:23 Arrival: Clear: 06/03/2012 19:23	X	3	0 - Other	11 12
2 ID: Type:	Dispatch: Arrival: Clear:				
3 ID: Type:	Dispatch: Arrival: Clear:				
4 ID: Type:	Dispatch: Arrival: Clear:				
5 ID: Type:	Dispatch: Arrival: Clear:				
6 ID: Type:	Dispatch: Arrival: Clear:				
7 ID: Type:	Dispatch: Arrival: Clear:				
8 ID: Type:	Dispatch: Arrival: Clear:				
9 ID: Type:	Dispatch: Arrival: Clear:				
10 ID: Type:	Dispatch: Arrival: Clear:				
11 ID: Type:	Dispatch: Arrival: Clear:				
12 ID: Type:	Dispatch: Arrival: Clear:				
13 ID: Type:	Dispatch: Arrival: Clear:				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 06/03/2012 | Station: 116 | Incident Number: 0130184 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: E116 Type: 11	Dispatch 06/03/2012 18:23:28 Arrival Clear 06/03/2012 19:23:08	Sent: X	3 #	0 - Other	11 12

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
263396	SHOOK, STEVEN		X				
450536	HALEY, DAVID		X				
533520	DRUDE, GREGORY		X				

2 ID: Type:	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID: Type:	Dispatch Arrival Clear	Sent	#		

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

NFIRS - 1 Basic

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/05/2012	116	0291451	0

B Location

Address Type	Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1 - Street addres	340	East	192ND		

Apt./Suite/Room	City	State	Zip Code
	CARSON	CA	000000000

Census Tract	Cross street or directions, as applicable
543400	btwn S MAIN ST

C Incident Type

111 - Building fires

D Aid Given or Received

Their FDID	Their State	Their Incident Number

N - None

E1 Dates & Times

Midnight is 0000

	Month	Day	Year	Hour	Min	Seconds
Alarm	12/05/2012			19:54:53		
Arrival	12/05/2012			19:58:26		
Controlled						
Last Unit Cleared	12/05/2012			20:45:11		

E2 Shifts & Alarms

Local Option

Shift or platoon	Alarms	District
A	1	

E3 Special Studies

Local Option

Special Study ID#	Special Study Value

F Actions Taken

11 - Extinguish
12 - Salvage & overhaul
51 - Ventilate

Actions Taken

G1 Resources

[N] Check this box and skip this section if an Apparatus or Personnel form is used.

	Apparatus	Personnel
Suppression	0	0
EMS	0	0
Other	13	44

[N] Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses & Values

LOSSES: Required for all fires if known. Optional for non fires.

Property	$ 0
Contents	$ 100

PRE-INCIDENT VALUE: Optional

Property	$ 250000
Contents	$ 25000

H1 Casualties

	Deaths	Injuries
Fire Service	0	0
Civilian	0	0

H2 Detector

H3 Hazardous Materials Release

I Mixed Use Property

J Property Use

161 - Restaurant or cafeteria

K1 Person/Entity Involved

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

K2 Owner

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | Zip Code | Business name (if applicable) | Area Code | Phone Number

NFIRS - 2
Fire

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/05/2012	116	0291451	0

B Property Details

B1 Estimated number of residential living units in building of origin: 0 — Not Residential: N

B2 Number of buildings involved:

B3 Acres burned (outside fires):

C On-Site Materials or Products

On-site materials: NNN - None

On-site materials use:

D Ignition

D1 Area of fire origin: 62 - Heating room or area, w

D2 Heat source: 40 - Hot or smoldering objec

D3 Item first ignited: UU - Undetermined

D4 Type of material first ignited:

Confined to object of origin:

E1 Cause of Ignition

Cause of ignition: 2 - Unintentional

E2 Factors Contributing To Ignition

12 - Heat source too close to combustibles.

Factors contributing to ignition

E3 Human Factors Contributing To Ignition

N - None

Estimated age of person involved:

Gender of person involved:

F1 Equipment Involved In Ignition

Equipment Involved: NNN - None

Brand:

Model:

Serial #:

Year:

F2 Equipment Power

Equipment power source:

F3 Equipment Portability

Equipment portability:

G Fire Suppression Factors

Fire suppression factors:

H1 Mobile Property Involved

Mobile property involved: N - None

H2 Mobile Property Type & Make

Mobile property type:

Mobile property make:

Mobile property model:

Year:

License plate number:

State:

VIN number:

Local Use

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/05/2012	116	0291451	0

NFIRS-3 Structure Fire

I1 Structure Type

1 - Enclosed building

Structure type

I2 Building Status

2 - Occupied and operating

Building status

I3 Building Height

0 — Total number of stories at or above grade

0 — Total number of stories below grade

I4 Main Floor Size

Total square feet

OR

50 Length in feet BY 30 Width in feet

J1 Fire Origin

1 — Story of fire origin

J2 Fire Spread

2 - Confined to room

Fire spread

J3 Number of Stories Damaged By Flame

- Number of stories w/ minor damage (1 to 24% flame damage)
- Number of stories w/ significant damage (25 to 49% flame damage)
- Number of stories w/ heavy damage (50 to 74% flame damage)
- Number of stories w/ extreme damage (75 to 100% flame damage)

K Material Contributing Most To Flame Spread

K1 — Item contributing most to flame spread

K2 — Type of material contributing most to flame spread

L1 Presence of Detectors

1 - Detectors Present

Presence of detectors

L2 Detector Type

1 - Smoke

Detector type

L3 Detector Power Supply

2 - Hardwire Only

Detector power supply

L4 Detector Operation

1 - Fire too small to ope

Detector operation

L5 Detector Effectiveness

Detector effectiveness

L6 Detector Failure Reason

Detector failure reason

M1 Presence of Automatic Extinguishment System

1 - Present

Presence of automatic extinguishment system (AES)

M2 Type of Automatic Extinguishment System

1 - Wet pipe sprinkler

Type of automatic extinguishment system

M3 Automatic Extinguishment System Operation

3 - Fire too small to o

Automatic extinguishment system operation

M4 Number of Sprinkler Heads Operating

Number of sprinkler heads operating

M5 Automatic Extinguishment System Failure Reason

Automatic extinguishment system failure reason

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/05/2012	116	0291451	0

NFIRS Remarks

Remarks

E116 INVESTIGATING REPORT OF STRUCTURE FIRE. FOUND 50 X 50 RESTURANT FULL OF SMOKE WITH NO FIRE SHOWING UPON ARRIVAL. BUILDING SPRINKLERED BUT NO ACTIVATION DUE TO FIRE SIZE. LOCATION OF SMOKE SOURCE FOUND TO BE WITHIN WATER HEATER / UTILITY ROOM. APPARENT CAUSE DUE TO LINNENS BEING PLACED UPON COFFE POT WARMING ELEMENT. DAMAGE TO LINNENS ONLY. NO STRUCTURE DAMAGE. SMOLDERING FIRE WITH NO FLAME DAMAGE. LOSS OF APROX. $100 (LINNENS ONLY). NO INJURIES. STAFF ON SCENE NOTIFIED OF DAMAGE.

M Authorization

Officer in charge ID	Signature	Position or rank	Assignment	Month Day Year
				12/05/2012

Member making report ID	Signature	Position or rank	Assignment	Month Day Year
263396	STEVEN SHOOK		1	12/05/2012

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/05/2012	116	0291451	0

NFIRS - 9
Apparatus or Resources

B Apparatus or Resource (Use codes listed below)	Dates and Times (Month Day Year Hours/Mins)	Sent (X)	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken
1 ID: Q116 Type: 13	Dispatch: 12/05/2012 19:54 Arrival: 12/05/2012 19:58 Clear: 12/05/2012 20:28	X	4	0 - Other	51
2 ID: LF127 Type: 12	Dispatch: 12/05/2012 19:54 Arrival: Clear: 12/05/2012 20:01	X	6	0 - Other	93
3 ID: E116 Type: 11	Dispatch: 12/05/2012 19:54 Arrival: 12/05/2012 19:59 Clear: 12/05/2012 20:42	X	3	0 - Other	11, 12
4 ID: E236 Type: 11	Dispatch: 12/05/2012 19:54 Arrival: Clear: 12/05/2012 20:01	X	4	0 - Other	93
5 ID: E95 Type: 11	Dispatch: 12/05/2012 19:54 Arrival: 12/05/2012 19:59 Clear: 12/05/2012 20:01	X	5	0 - Other	93
6 ID: E158 Type: 11	Dispatch: 12/05/2012 19:54 Arrival: Clear:	X	4	0 - Other	93
7 ID: E105 Type: 11	Dispatch: 12/05/2012 19:54 Arrival: Clear:	X	4	0 - Other	93
8 ID: S158 Type: 76	Dispatch: 12/05/2012 19:54 Arrival: Clear:	X	2	0 - Other	93
9 ID: BC7 Type: 91	Dispatch: 12/05/2012 19:54 Arrival: Clear: 12/05/2012 20:01	X	1	0 - Other	93
10 ID: BC18 Type: 91	Dispatch: 12/05/2012 19:54 Arrival: Clear: 12/05/2012 19:58	X	1	0 - Other	93
11 ID: S116 Type: 76	Dispatch: 12/05/2012 19:55 Arrival: Clear: 12/05/2012 20:30	X	2	0 - Other	11, 12
12 ID: E36 Type: 11	Dispatch: 12/05/2012 19:56 Arrival: Clear: 12/05/2012 20:01	X	4	0 - Other	93
13 ID: E10 Type: 11	Dispatch: 12/05/2012 19:57 Arrival: Clear: 12/05/2012 20:01	X	4	0 - Other	93

NFIRS - 10 Personnel

A

FDID	State	Incident Date (MM DD YYYY)	Station	Incident Number	Exposure
19110	CA	12/05/2012	116	0291451	0

B

Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID Q116 Type 13	Dispatch 12/05/2012 19:54:53 Arrival 12/05/2012 19:58:37 Clear 12/05/2012 20:28:20	Sent X	4 #	0 - Other	51

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
425376	TOMITA, GRANT		X				
450538	BRUNNER, RORY		X				
510161	PEINADO, JOSEPH		X				
533520	DRUDE, GREGORY		X				

2 ID LF127 Type 12	Dispatch 12/05/2012 19:54:53 Arrival Clear 12/05/2012 20:01:16	Sent X	6 #	0 - Other	93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
186966	DOWEY, KENT		X				
191313	FRANKLIN, STEVE		X				
402180	GIFFORD, ROBERT		X				
475186	ARGUELLES, EDDIE		X				
486202	BRACK, ANDREW		X				
545838	NICHOLS, IAN		X				

3 ID E116 Type 11	Dispatch 12/05/2012 19:54:53 Arrival 12/05/2012 19:59:09 Clear 12/05/2012 20:42:26	Sent X	3 #	0 - Other	11 12

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
242792	FELANDO, JOSEPH		X				
263396	SHOOK, STEVEN		X				
476517	BUSH, ERIC		X				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 12/05/2012 | Station: 116 | Incident Number: 0291451 | Exposure: 0 | NFIRS - 10 Personnel

B — Apparatus or Resource | Dates and Times (Month Day Year Hours/Mins) | Sent [X] | Number of People | Use (Check ONE box for each apparatus to indicate its main use at the incident.) | Actions Taken (List up to 4 actions for each apparatus and each personnel.)

1 ID: E236 | Type: 11

Dispatch 12/05/2012 19:54:53
Arrival
Clear 12/05/2012 20:01:16

Sent: X | # of People: 4 | Use: 0 - Other | Actions Taken: 93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
284863	BARRETT, JEANE		X				
416517	LOFFREDO, CARLO		X				
539583	GRUNBAUM, GRANT		X				
548759	MENDOZA, JOSE		X				

2 ID: E95 | Type: 11

Dispatch 12/05/2012 19:54:53
Arrival 12/05/2012 19:59:54
Clear 12/05/2012 20:01:17

Sent: X | # of People: 5 | Use: 0 - Other | Actions Taken: 93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
296759	GOMEZ, TODD		X				
402600	EVANS, SCOTT		X				
476691	NOTHERN, MICHAEL		X				
522261	RATHBUN, SARA		X				
522279	MAGINN, JEREMY		X				

3 ID: E158 | Type: 11

Dispatch 12/05/2012 19:54:53
Arrival
Clear

Sent: X | # of People: 4 | Use: 0 - Other | Actions Taken: 93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
488510	KEEHN, JAMES		X				
513283	HEWISON, MARK		X				
526625	DMYTROWICZ, MICHAEL		X				
542951	FASCENELLI, DOUGLAS		X				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 12/05/2012 | Station: 116 | Incident Number: 0291451 | Exposure: 0 | NFIRS - 10 Personnel

B — Apparatus or Resource | Dates and Times (Month Day Year Hours/Mins) | Sent [X] | Number of People | Use (Check ONE box for each apparatus to indicate its main use at the incident.) | Actions Taken (List up to 4 actions for each apparatus and each personnel.)

1 ID: E105 | Type: 11 | Dispatch: 12/05/2012 19:54:53 | Arrival: | Clear: | Sent: X | # of People: 4 | Use: 0 - Other | Actions Taken: 93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
186892	SOLIS, RAFAEL		X				
187034	REYNOLDS, ERIC		X				
410580	TINSON, KISER		X				
429868	FLEETWOOD, CRAIG		X				

2 ID: S158 | Type: 76 | Dispatch: 12/05/2012 19:54:53 | Arrival: | Clear: | Sent: X | # of People: 2 | Use: 0 - Other | Actions Taken: 93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
464141	ANDERSON, KYLE		X				
542955	HENDRIKS, PETER		X				

3 ID: BC7 | Type: 91 | Dispatch: 12/05/2012 19:54:53 | Arrival: | Clear: 12/05/2012 20:01:22 | Sent: X | # of People: 1 | Use: 0 - Other | Actions Taken: 93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
112623	HASKELL, ROBERT		X				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 12/05/2012 | Station: 116 | Incident Number: 0291451 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: BC18 Type: 91	Dispatch 12/05/2012 19:54:53 Arrival Clear 12/05/2012 19:58:39	Sent X	1 #	0 - Other	93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
272089	CROSS, DENNIS		X				

2 ID: S116 Type: 76	Dispatch 12/05/2012 19:55:29 Arrival Clear 12/05/2012 20:30:41	Sent X	2 #	0 - Other	11	12

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
489725	GUTIERREZ, FRANK		X				
520159	LOOMIS, BRIAN		X				

3 ID: E36 Type: 11	Dispatch 12/05/2012 19:56:52 Arrival Clear 12/05/2012 20:01:35	Sent X	4 #	0 - Other	93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
476729	O'HAGAN, GERALD		X				
502681	MACK, DAVID		X				
541825	BANFIELD, KEVIN		X				
542952	HARRISON, NATHANIEL		X				

A | FDID: 19110 | State: CA | Incident Date (MM DD YYYY): 12/05/2012 | Station: 116 | Incident Number: 0291451 | Exposure: 0 | NFIRS - 10 Personnel

B Apparatus or Resource	Dates and Times (Month Day Year Hours/Mins)	Sent [X]	Number of People	Use (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID: E10 Type: 11	Dispatch 12/05/2012 19:57:11 Arrival Clear 12/05/2012 20:01:16	Sent: X	4 #	0 - Other	93

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
418269	CANNIZZARO, MICHAEL		X				
438733	BURDEN, JOEL		X				
535656	DURHAM, SEAN		X				
547601	MURILLO, BRANDON		X				

2 ID:	Dispatch Arrival Clear	Sent	#		
Type:					

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

3 ID:	Dispatch Arrival Clear	Sent	#		
Type:					

Personnel ID	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken

Appendix G

Request for Records Search to the
Los Angeles County Sanitation Districts and
Response Obtained from that Agency

PUBLIC RECORDS REQUEST FORM

ATTENTION REQUESTOR: To fulfill your request for records, please fill out this form completely, and identify specifically the type of records you are requesting. Requests must reasonably describe identifiable records prepared, owned, used, or retained by the Sanitation Districts.

Name:	Environmental Support Services	ON Date:
Company:		
Mailing A	Shannon Castagno	
City:	30251 Golden Lantern, Suite #E-305	Zip Code:
Phone Nur	Laguna Niguel, CA 92677	optional):
Email Add	Tel: 949-429-3564 - Fax: 949-429-3563 Shannon@EnvironmentalSupportServices.com	

REQUESTED RECORDS

*Please clearly describe each requested record or document (use additional copies of this form, as necessary)**

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

ESS requests the following information concerning the subject address which your agency may have on file:

1. copies of applications and permits for industrial waste discharge; and
2. copies of any and all violations concerning industrial waste discharge.

Time Period of Document Requested	From:	To:

* *Requests that are not specific and focused will be returned for more information. If requested, the Sanitation Districts will assist you in making focused and effective requests for identifiable records. The Sanitation Districts will not create new documents or records in response to a request.*

Shannon Castagno
Signature of Requestor

Submit requests by mail, email or fax to:

Records Administrator
County Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-4998
records_administrator@lacsd.org
Fax (562) 699-5422

Office Use Only:
Date request received:
Date initial response issued:
Date request was closed:

DOC # 1503368

PUBLIC RECORDS REQUEST FORM

ATTENTION REQUESTOR: To fulfill your request for records, please fill out this form completely, and identify specifically the type of records you are requesting. Requests must reasonably describe identifiable records prepared, owned, used, or retained by the Sanitation Districts.

Name:	Environmental Support Services	ON Date:
Company:		
Mailing A	Shannon Castagno	
City:	30251 Golden Lantern, Suite #E-305	Zip Code:
Phone Nur	Laguna Niguel, CA 92677	optional):
Email Add	Tel: 949-429-3564 - Fax: 949-429-3563 Shannon@EnvironmentalSupportServices.com	

REQUESTED RECORDS

*Please clearly describe each requested record or document (use additional copies of this form, as necessary)**

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

No records found

ESS requests the following information concerning the subject address which your agency may have on file:

1. copies of applications and permits for industrial waste discharge; and
2. copies of any and all violations concerning industrial waste discharge.

Time Period of Document Requested	From:	To:

* *Requests that are not specific and focused will be returned for more information. If requested, the Sanitation Districts will assist you in making focused and effective requests for identifiable records. The Sanitation Districts will not create new documents or records in response to a request.*

Shannon Castagno
Signature of Requestor

Submit requests by mail, email or fax to:

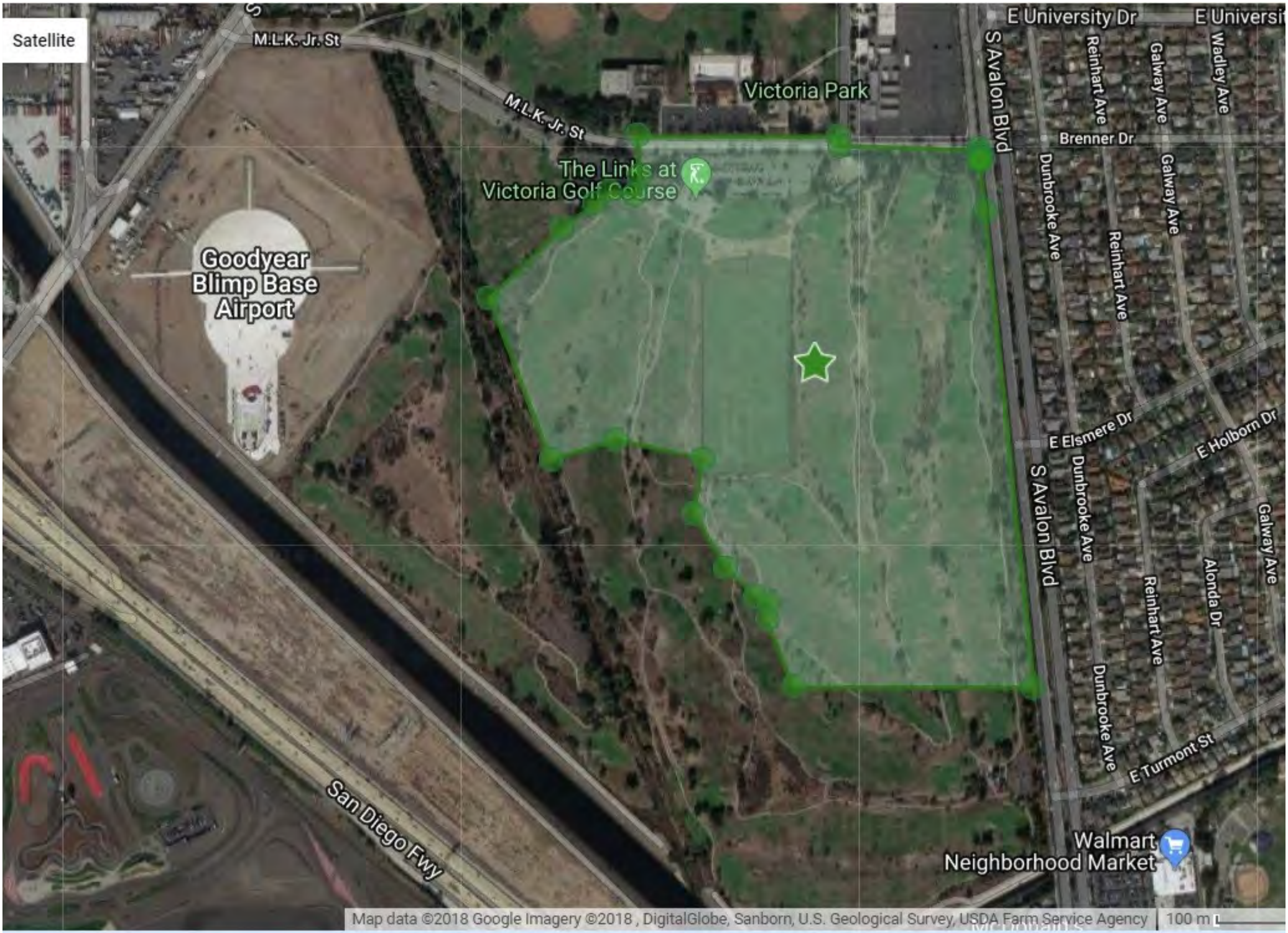
Records Administrator
County Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-4998
records_administrator@lacsd.org
Fax (562) 699-5422

Office Use Only:
Date request received:
Date initial response issued:
Date request was closed:

DOC # 1503368

DOC #

Smith L.


Satellite
M.L.K. Jr. St
M.L.K. Jr. St
Victoria Park
The Links at Victoria Golf Course
Goodyear Blimp Base Airport
E University Dr
S Avalon Blvd
Reinhart Ave
Galway Ave
Wadley Ave
Brenner Dr
Dunbrooke Ave
E Elsmere Dr
E Holborn Dr
Alonda Dr
E Turmont St
San Diego Fwy
Walmart Neighborhood Market
Map data ©2018 Google Imagery ©2018 , DigitalGlobe, Sanborn, U.S. Geological Survey, USDA Farm Service Agency
100 m

Appendix H

Photocopies Obtained from the
City of Carson Building Department

CERTIFICATE OF OCCUPANCY

CITY OF CARSON

BUILDING AND SAFETY DIVISION

This certifies that the building or structure or portion thereof, as described herein, complies with provisions of the Building Code for the following use(s) and occupancy group(s). No change shall be made in the character of occupancy or use of the building or structure without approval of the Building Official.

BUILDING ADDRESS 340 e. 192nd Street

LOCALITY Carson

PERMIT NO. bL0010180018

PERMIT DATE 01/24/2001

OWNER Los Angeles County

ADDRESS 301 N.

Occupancy	Occupant Load	Use of building (or portion)
S-3		**Multi- purpose room, pro shop, coffee shop, cart storage**

Issuing Office
Carson District Office
701 E. Carson St.
Carson CA 90745

By **Gary Nehrenberg**

Date Issued **August 14, 2001**

GA75 421

©WOLCOTTS INC 1988 LITHO IN U.S.A.

COUNTY OF LOS ANGELES
DEPARTMENT OF PU LIC WORKS
BUILDING AND SAFETY / AND DEVELOPMENT

CITY OF CARSON
701 CARSON
CARSON CA
PHONE: (310) 952-1766 EXT:

1205

BUILDING PERMIT
TENANT IMPROVEMENT
BL 1205 9706100048
DUPLICATE

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
VICTORIA GOLF COURSE

OWNER: TEL. NO:
VICTORIA GOLF COURSE (213) 233-3506-
310 E. 196TH ST
CARSON

APPLICANT: TEL. NO:
BRC GENERAL CONTRACTORS SAME -
3686 S. MAIN ST.
L.A. CA 90007

CONTRACTOR: TEL. NO:
BRC GENERAL CONTRACTORS (213) 233-3560-
3686 S. MAIN ST LIC. NO
L.A. CA 90007 646791 B-1

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CMP:
X 3 04

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	3000	1	VN	B

EXIST BLDG USE: CLUB USE ZONE:
EXIST OCC GRP: B

BLDGS. NOW ON LOT: VALUATION:
13,500

FEES PAID

FEE DESCRIPTION:	QUANTITY: UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE		26.00
AE STRONG MOTION OTHER	13500.00 VAL	2.84
A6 PLAN MAINTENANCE FEE	13500.00 VAL	7.20
D2 PERMIT W/O EN-HC	13500.00 VAL	350.80
	TOTAL FEES	386.84

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192 ST E
CRSN CA
NEAREST CROSS STREET:
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
08/07/97	MW	08/07/98

FINAL DATE FINAL BY: CODE:
8-12-97

DESCRIPTION OF WORK
REMOVE AND REPLACE 6/U LAM BEAMS IN CLUB HOUSE W/NEW POST & FOOTINGS

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1300

BUILDING PERMIT
COMMERCIAL ADD/ALT/REP
BL 1300 9812140029
DUPLICATE

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:

OWNER: TEL. NO:
LCNT

APPLICANT: TEL. NO:
D. MICHEAL HAMNER (323) 721-2480-
203 W. FLORA
MONTERET PARK,CA

CONTRACTOR: TEL. NO:
CEVES, JULIO (626) 966-3688
235 N. CITRUS ST. LIC. NO
WEST COVINA, CA. 91791 5883688 B

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CM?:
XX 3 04

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	100	1	VN	B

EXIST BLDG USE: COMME USE ZONE: MH
EXIST OCC GRP: B

BLDGS. NOW ON LOT: VALUATION: 60,000

FEES PAID

FEE DESCRIPTION:	QUANTITY: UOM:	AMOUNT:
C1 PLANCHECK W/HC	60000.00 VAL	985.86
AA BLDG PERMIT ISSUANCE		19.30
AE STRONG MOTION OTHER	60000.00 VAL	12.60
A6 PLAN MAINTENANCE FEE	60000.00 VAL	13.90
C2 PERMIT W/HANDICAP	60000.00 VAL	655.83
08 CERTIF OF OCCUPANCY		70.40
	TOTAL FEES	1,757.89

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192
CRSN CA
NEAREST CROSS STREET:
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
11/08/99	RT	05/06/00

FINAL DATE	FINAL BY:	CODE:
7-24-2001	Duette	

DESCRIPTION OF WORK
ADA UPGRADES TO PARKING FACILITIES, PUBLIC WALKWAYS, REST-ROOMS (INCLUDING 1 COURSE RESTROOM) PUBLIC BUILDINGS

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR CLUBHOUSE ONLY	1-20-00	Duette
~~RAISED FLOOR FRAMING~~ UNDERSLAB COURSE ONLY		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS	2-2-00	
FRAME INSPECTION		Duette
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL	4-4-00	Duette
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		
U/G PLUMBING COURSE REST ROOM	2-2-00	

OK TO COVER WALLS.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1300

BUILDING PERMIT
COMMERCIAL ADD/ALT/REP
BL 1300 0103200004

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
ARNOLD PALMER GOLF

OWNER: TEL. NO:
COUNTY OF LOS ANGELES
301 N. BALDWIN AVE
ARCADIA,CA 91007

APPLICANT: TEL. NO:
HOOVER (562) 438-8818-
39 NIETO AVE.
LONG BEACH, CA90803

CONTRACTOR: TEL. NO:
PARKWAY CONSTRUCTION AND ASSOCIATES (972) 221-1979-303
1000 CIVIC CIRCLE LIC. NO
LEWISVILLE, TX. 75067 3961 C

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO:	SEWER MAP BOOK:	PAGE:	FIRE ZONE:	CMP:
XX			3	08

NO. OF FAMILIES:	DWELLING UNITS:	APT/COND:	STAT CLASS:
		NO	22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	216	1	III-	S1

EXIST BLDG USE: UTILI USE ZONE: MH
EXIST OCC GRP: S1

BLDGS. NOW ON LOT: VALUATION: 15,000

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE			20.00
AE STRONG MOTION OTHER	15000.00	VAL	3.15
D1 PLANCHECK W/O EN-HC	15000.00	VAL	183.85
D2 PERMIT W/O EN-HC	15000.00	VAL	216.30
D7 ADDNL PLANCHECK FEE	2.00	HOU	145.73
	TOTAL FEES		569.03

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192 ST E
CRSN CA
NEAREST CROSS STREET: MAIN STREET
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
03/20/01	MW	09/16/01

FINAL DATE	FINAL BY:	CODE:
7-24-2001		

DESCRIPTION OF WORK
ADDITION OF BALL MACHINE ROOM.

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON # 1300
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

BUILDING PERMIT
FIRE SPRINKLER
BL 1300 0102140059

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
VICTORIA GOLF CLUBHOUSE

OWNER: TEL. NO:
COUNTY OF LOS ANGELES -
301 N. BALDWIN AVE
ARCADIA, CA 91007

APPLICANT: TEL. NO:
WOLF (562) 946-5060-

CONTRACTOR: TEL. NO:
QUALCO FIRE PROTECTION, INC. (562) 946-5060-
13151 FLORENCE LIC. NO
SANTA FE SPRINGS, CA 90670 786012 C16

ARCHITECT OR ENGINEER: TEL. NO:
-
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CMP:
00

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 20

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

NUMBER OF ADDED/RELOCATED SPRINKLER HEADS
SQ. FT
STRUCTURE: 13000

EXIST BLDG USE:
EXIST OCC GRP:

BLDGS. NOW ON LOT: VALUATION:
30,000

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE			20.00
AE STRONG MOTION OTHER	30000.00	VAL	6.30
A6 PLAN MAINTENANCE FEE	30000.00	VAL	8.80
D0 FIRE SPRINKLER PC	30000.00	VAL	327.58
D2 PERMIT W/O EN-HC	30000.00	VAL	385.40
	TOTAL FEES		748.08

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192 ST E
CRSN CA
NEAREST CROSS STREET: MAIN
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
02/14/01	MH	08/13/01

FINAL DATE	FINAL BY:	CODE:
7-24-01	Quette	

DESCRIPTION OF WORK
ADD 19 AND RELOCATE 42 FIRE SPRINKLERS

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
FIRE DEPARTMENT INSPECT		
FIRE SPRINKLER HANGERS		
FIRE DEPARTMENT APPROVAL		

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON # 1300
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

BUILDING PERMIT
TENANT IMPROVEMENT
BL 1300 0010180018

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
ARNOLD PALMER GOLF

OWNER: TEL. NO:
COUNTY OF LOS ANGELES
301 N. BALDWIN AVE
ARCADIA,CA 91007

APPLICANT: TEL. NO:
HOOVER (562) 438-8818-
39 NIETO AVE.
LONG BEACH, CA90803

CONTRACTOR: TEL. NO:
PARKWAY CONSTRUCTION AND ASSOCIATES (972) 221-1979-303
1000 CIVIC CIRCLE LIC. NO
LEWISVILLE, TX. 75067 3961 C

ARCHITECT OR ENGINEER: TEL. NO:
-
LIC. NO:

MAP NO:	SEWER MAP BOOK:	PAGE:	FIRE ZONE:	CMP:
X			3	04

NO. OF FAMILIES:	DWELLING UNITS:	APT/COND:	STAT CLASS:
		NO	22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	1790	1	VN	S3

EXIST BLDG USE: PRO S USE ZONE:
EXIST OCC GRP: S3

BLDGS. NOW ON LOT: VALUATION: 175,000

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
A1 PLANCHECK W/EN-HC	125000.00	VAL	1,744.45
A2 PERMIT W/ENERGY-HC	175000.00	VAL	2,893.24
08 CERTIF OF OCCUPANCY			72.80
	TOTAL FEES		4,710.49

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192 ST E
CRSN CA
NEAREST CROSS STREET: MAIN STREET
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
01/24/01	MH	07/23/01

FINAL DATE	FINAL BY:	CODE:
8-13-2001	Duette	

DESCRIPTION OF WORK
EXTEND EXISTING CART STORAGE BY 1780 SQ FT.
REMODEL MULTI-PURPOSE ROOM,PRO SHOP,COFFEE SHOP (2870 SQ FT)

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION except @ cart storage	4-4-01	Duette (by Dupuis)
FIRE SPRINKLER HANGERS	8-13-01	Duette for R Lewis (Fire Dept.)
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH	4-4-01	Duette
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS	8-6-01	Duette
LOT DRAINAGE		
MASONRY	5-31-01	Duette

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1300

BUILDING PERMIT
COMMERCIAL ADD/ALT/REP
BL 1300 0003160019

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
ARNOLD PALMER GOLF MANAGEMENT

OWNER: TEL. NO:
COUNTY OF LOS ANGELES (626) 821-4606-
301 N. BALDWIN AVE
ARCADIA,CA 91007

APPLICANT: TEL. NO:
PAUGH (909) 721-4462-
733 S. BUENA VISTA
REDLANDS,CA 92373

CONTRACTOR: TEL. NO:
MANHIRE CONSTRUCTION INC. (909) 944-6700-
9595 LUCAS RANCH ROAD LIC. NO
RANCHO CUCAMONGA, CA 91730 576392AC10

ARCHITECT OR ENGINEER: TEL. NO:
-
LIC. NO:

MAP NO:	SEWER MAP BOOK:	PAGE:	FIRE ZONE:	CMP:
X			3	04

NO. OF FAMILIES:	DWELLING UNITS:	APT/COND:	STAT CLASS:
		NO	22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	0	0	III	B

EXIST BLDG USE: GOLF USE ZONE: MH
EXIST OCC GRP: B

BLDGS. NOW ON LOT: VALUATION: 253,000

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
D1 PLANCHECK W/O EN-HC	253000.00	VAL	1,359.74
AA BLDG PERMIT ISSUANCE			19.30
AE STRONG MOTION OTHER	253000.00	VAL	53.13
A6 PLAN MAINTENANCE FEE	253000.00	VAL	35.90
D2 PERMIT W/O EN-HC	253000.00	VAL	1,599.70
	TOTAL FEES		3,067.77

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192 ST E
CRSN CA
NEAREST CROSS STREET: AVALON BLVD.
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
06/07/00	RT	12/04/00

FINAL DATE	FINAL BY:	CODE:
7-24-2001	Duette	

DESCRIPTION OF WORK
CONSTRUCT AND INSTALL DRIVING RANGE POLES AND NETTING 25'-55

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		

LOS ANGELES COUNTY PUBLIC WORKS Public Service That Works

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1300

BUILDING PERMIT
FIRE SPRINKLER
BL 1300 0102140022

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
VICTORIA GOLF CLUBHOUSE

OWNER: TEL. NO:
COUNTY OF LOS ANGELES
301 N. BALDWIN AVE
ARCADIA,CA 91007

APPLICANT: TEL. NO:
WOLF (562) 946-5060-

CONTRACTOR: TEL. NO:
QUALCO FIRE PROTECTION,INC. (562) 946-5060-
13151 FLORENCE LIC. NO
SANTA FE SPRINGS, CA 90670 786012 C16

ARCHITECT OR ENGINEER: TEL. NO:
-
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CM1:
00

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 20

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

NUMBER OF ADDED/RELOCATED SPRINKLER HEADS
SQ. FT
STRUCTURE: 13000

EXIST BLDG USE:
EXIST OCC GRP:

BLDGS. NOW ON LOT: VALUATION:
30,000

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE			20.00
AE STRONG MOTION OTHER	30000.00	VAL	6.30
A6 PLAN MAINTENANCE FEE	30000.00	VAL	8.80
D1 PLANCHECK W/O EN-HC	30000.00	VAL	327.58
D2 PERMIT W/O EN-HC	30000.00	VAL	385.40
	TOTAL FEES		748.08

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192 ST E
CRSN CA
NEAREST CROSS STREET: MAIN
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
02/14/01	JY	08/13/01

FINAL DATE FINAL BY: CODE:
7-24-2001 Duette

DESCRIPTION OF WORK
ADD 19 AND RELOCATE 42 FIRE SPRINKLERS

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
FIRE DEPARTMENT INSPECT		
FIRE SPRINKLER HANGERS		
FIRE DEPARTMENT APPROVAL		

COUNT ' OF LOS ANGELES
DEPARTME IT OF PUBLIC WORKS
BUILDING AND S\FETY / LAND DEVELOPMENT

CITY OF CARSON
701 CARSON
CARSON CA
PHONE: (310) 952-1766 EXT:

1205

BUILDING PERMIT
COMMERCIAL ADD/ALT/REP
BL 1205 9712040058

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:

OWNER: TEL. NO:
VICTORIA GOLF COURSE (310) 532-7690-
340 E. 192ND ST.

APPLICANT: TEL. NO:
ARNOLD PALMER GOLF (310) 532-7690-
340 E. 192ND ST
CARSON, CA 90745

CONTRACTOR: TEL. NO:
HARRISON/ROBERTS ENV. MGMT.* (562) 795-0088-
11140 LOS ALAMITIS BL. #203 LIC. NO
LOS ALAMITOS, CA 90720 673178 A

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CMP:
XX 3 C4

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	350	1	VN	B

EXIST BLDG USE: COMM USE ZONE: MH
EXIST OCC GRP: B

BLDGS. NOW ON LOT: VALUATION: 29,800

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE			26.00
AE STRONG MOTION OTHER	29800.00	VAL	6.26
A6 PLAN MAINTENANCE FEE	29800.00	VAL	15.30
D1 PLANCHECK W/O EN-HC	29800.00	VAL	561.51
D2 PERMIT W/O EN-HC	29800.00	VAL	660.60
	TOTAL FEES		1,269.67

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192
CRSN CA
NEAREST CROSS STREET:
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
12/04/97	MH	12/04/98

FINAL DATE	FINAL BY:	CODE:
7-14-99		

DESCRIPTION OF WORK
NEW ABOVE GROUND TANK INSTALLATION

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CARSON # 1300
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

BUILDING PERMIT
ALTERATION/REPAIR
BL 1300 0103130070

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:

OWNER: TEL. NO:
APGM INC.
340 E. 192ND

APPLICANT: TEL. NO:
CROWN ROOFING (310) 618-6822-
22424 S.NORMANDIE
TORRANCE, CA

CONTRACTOR: TEL. NO:
CROWN ROOFING (310) 618-6822-
22424 S. NORMANDIE AVE LIC. NO
TORRANCE, CA 90502 B/L 2086 *

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO:	SEWER MAP BOOK:	PAGE:	FIRE ZONE:	CMP:
XX			3	04

NO. OF FAMILIES:	DWELLING UNITS:	APT/COND:	STAT CLASS:
		NO	22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

REQUIRED SET BACK	YARD:	HWY:	TOTAL SETBACK FROM PROP LINE:	EXIST WIDTH:
FRONT PL-				
SIDE PL-				

METHANE Y |_| N |_|

STRUCTURE:	SQ. FT	NO. OF STORIES	CONST TYPE
			III

EXIST BLDG USE: GOLF USE ZONE: MH
EXIST OCC GRP:

BLDGS. NOW ON LOT: VALUATION: 15,500

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE			20.00
AE STRONG MOTION OTHER	15500.00	VAL	3.26
D2 PERMIT W/O EN-HC	15500.00	VAL	228.40
	TOTAL FEES		251.66

* ADDITIONAL DATA ON FILE

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
340 192
CRSN CA
NEAREST CROSS STREET:
THOMAS PAGE: GRID: LOCALITY: LCNT

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
03/13/01	MH	09/09/01

FINAL DATE	FINAL BY:	CODE:
7-24-2001	Duette	

DESCRIPTION OF WORK
TEAR-OFF HOT MOP ASTM D6163

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS		
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS		
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING for 2 Westerly Bldgs.	3-14-01	Duette
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		
Roof Sheathing for Easterly Bldg.	3-26-01	Duette

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CITY OF CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1205

BUILDING PERMIT
COMMERCIAL ADD/ALT/REP
BL 1205 0608290058

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:

TENANT:
GOODYEAR

OWNER: TEL. NO:
GOODYEAR AIRSHIP OPERATIONS (310) 327-6565-
19200 S. MAIN ST.
CARSON

APPLICANT: TEL. NO:
INNOVATIVE CONSTRUCTION (310) 372-0166-

CONTRACTOR: TEL. NO:
INNOVATIVE CONSTRUCITON SOLUTIONS (714) 893-6366-
7125 FENWICK LANDE UNIT O LIC. NO
WESTMINSTER CA 721855 A B *

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CMP:
X 3 03

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	176	0	N/A	XX

EXIST BLDG USE: COMME USE ZONE: XX
EXIST OCC GRP: XX

BLDGS. NOW ON LOT: VALUATION:
49,400

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
D1 PLANCHECK W/O EN-HC	49400.00	VAL	836.91
AA BLDG PERMIT ISSUANCE			26.00
AE STRONG MOTION OTHER	49400.00	VAL	10.37
A6 PLAN MAINTENANCE FEE	49400.00	VAL	23.30
D2 PERMIT W/O EN-HC	49400.00	VAL	984.60
	TOTAL FEES		1,881.18

* ADDITIONAL DATA ON FILE

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
19200 MAIN ST S
CRSN CA
NEAREST CROSS STREET: NEAR 190TH
THOMAS PAGE: GRID: LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
09/07/06	JAY	09/02/07

FINAL DATE: 5/19/06 FINAL BY: CODE:

DESCRIPTION OF WORK:
MOORING ANCHOR REPLACEMENT.

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS	9/14/06	
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS	5/14/06	
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH		
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CITY OF CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1205

BUILDING PERMIT
TENANT IMPROVEMENT
BL 1205 0806250052

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:
7339-017-002

TENANT:

OWNER: TEL. NO:
GOODYEAR TIRE;RUBBER CO (310) 720-4321-
1144 MARKET ST

APPLICANT: TEL. NO:
SAME AS OWNER -

CONTRACTOR: TEL. NO:
SAME AS OWNER -
LIC. NO

ARCHITECT OR ENGINEER: TEL. NO:
-
LIC. NO:

MAP NO: SEWER MAP BOOK: PAGE: FIRE ZONE: CMP:
XX 3 04

NO. OF FAMILIES: DWELLING UNITS: APT/COND: STAT CLASS:
NO 22

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	NO

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE	NEW OCCUP GROUP
STRUCTURE:	2160	1	N/A	S1

EXIST BLDG USE: COMME USE ZONE:
EXIST OCC GRP: S1

BLDGS. NOW ON LOT: VALUATION:
300,000

FEES PAID

FEE DESCRIPTION:	QUANTITY:	UOM:	AMOUNT:
A1 PLANCHECK W/EN-HC	300000.00	VAL	3,112.95
AA BLDG PERMIT ISSUANCE			26.00
AE STRONG MOTION OTHER	300000.00	VAL	63.00
A2 PERMIT W/ENERGY-HC	300000.00	VAL	3,662.29
A6 PLAN MAINTENANCE FEE	300000.00	VAL	76.50
	TOTAL FEES		6,940.74

Slave forms & concrete Pflow 11/8/08
Dickey

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
19200 MAIN ST S
GARD CA 90248
NEAREST CROSS STREET:
THOMAS PAGE: 764 GRID: C3 LOCALITY: CARSON

ISSUED ON: 09/02/08 PROCESSED BY: JIY EXPIRES ON: 03/01/09

FINAL DATE 12/16/08 FINAL BY: Dickey CODE:

DESCRIPTION OF WORK
CONCRETE FOUNDATIONS FOR MODULAR BUILDING

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
LOCATION AND SETBACKS	9/29/08	Dickey
SOILS ENGINEER APPROVAL		
FOUNDATION/TRENCH FORMS	9/29/08	
SLAB/UNDER FLOOR		
RAISED FLOOR FRAMING		
UNDERFLOOR INSULATION		
FLOOR SHEATHING		
ROOF SHEATHING		
SHEAR PANELS		
FRAME INSPECTION		
FIRE SPRINKLER HANGERS		
INSULATION/WEATHER STRIP		
INTERIOR LATH/DRYWALL		
EXTERIOR LATH	11/12/08	Dickey
RATED FLOOR/CEIL ASSEM.		
RATED WALL ASSEMBLIES		
RATED SHAFTS/OPENINGS		
T-BAR CEILINGS		
LOT DRAINAGE		

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY / LAND DEVELOPMENT

CITY OF CARSON
701 CARSON
CARSON CA 90745
PHONE: (310) 952-1766 EXT:

1205

BUILDING PERMIT
DEMOLITION
BL 1205 0806230042

LEGAL ID:
ON FILE

ASSESSOR INFORMATION NUMBER:
7339-017-002

TENANT:
GOOD YEAR BLIMP FACILITY

OWNER: TEL. NO:
GOODYEAR TIRE;RUBBER CO (330) 796-3457-
1144 MARKET ST

APPLICANT: TEL. NO:
HINTZ;MIKE (909) 469-2600-

CONTRACTOR: TEL. NO:
THREE D SERVICE CO (909) 469-2600-
1551 E. MISSION BL LIC. NO
POMONA, CA 91766 252618 C21 *

ARCHITECT OR ENGINEER: TEL. NO:
LIC. NO:

MAP NO:	SEWER MAP BOOK:	PAGE:	FIRE ZONE:	CMP:
X				25

NO. OF FAMILIES:	DWELLING UNITS:	APT/COND:	STAT CLASS:
		NO	23

AIR QUALITY:	SCHOOL WITHIN 1000 FEET	HAZARDOUS MATERIALS
NO	NO	YES

METHANE Y |_| N |_|

	SQ. FT	NO. OF STORIES	CONST TYPE
STRUCTURE:	1040		

EXIST BLDG USE: OFFIC USE ZONE:
EXIST OCC GRP:

BLDGS. NOW ON LOT: VALUATION:
1 15,000

FEES PAID

FEE DESCRIPTION:	QUANTITY: UOM:	AMOUNT:
AA BLDG PERMIT ISSUANCE		26.00
02 DEMOLITION INSPECTN		201.00
TOTAL FEES		227.00

* ADDITIONAL DATA ON FILE

REPORT ID: DPR261 ROUTE TO: BS1205

BUILDING ADDRESS:
19200 MAIN ST S
GARD CA 90248
NEAREST CROSS STREET: 192ND STREET
THOMAS PAGE: 764 GRID: C3 LOCALITY: CARSON

ISSUED ON:	PROCESSED BY:	EXPIRES ON:
06/23/08	RJ	12/20/08

FINAL DATE	FINAL BY:	CODE:
7/23/08	Dickay	

DESCRIPTION OF WORK
DEMO MODULAR OFFICE AND CANOPY

SPECIAL CONDITIONS:

APPROVALS	DATE	INSPECTOR SIGNATURE
PEDESTRIAN PROTECTION		
SEWER DISCONNECTION	7/23/08	Dickay
ABANDON PRIVATE DISPOSAL		
UNDERGRND STRUCT REMOVAL AND SOIL RECOMPACTION		

Appendix I

Request for Records Search to the
South Coast Air Quality Management District

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Information Management
Public Records Unit

Direct Dial: (909) 396-3700
FAX: (909) 396-3330

PUBLIC RECORDS REQUEST FORM

PRU Office Use Only
CONTROL NUMBER

ATTENTION REQUESTOR: To expedite your request for District records, please fill out this form completely, and identify specifically the type of records you are requesting. Please limit your request to one facility or one site address for each request form filed, and three requested items per form. Additional forms or pages can be used if requesting information for more than one facility or for records not identified on this form. Requests should reasonably describe identifiable records prepared, owned, used, or retained by the District. Public Records Unit staff is available to assist you in identifying those records in the District's possession. The District is not required by law to create a new record or list from an existing record.

REQUESTOR INFORMATION

NAME: Shannon Castagno		DATE: 5/30/18
COMPANY: Environmental Support Services		
MAILING ADDRESS: 30251 Golden Lantern, #E305		
CITY: Laguna Niguel	STATE: CA	ZIP CODE: 92677
PHONE NUMBER: (949) 429-3564	FAX NUMBER: (949) 429-3563	
EMAIL ADDRESS: Shannon@EnvironmentalSupportServices.com		

REQUESTED RECORDS (*3 items per form*)

☐ Applications (APPLS)	☐ Complaints	☐ Asbestos Notifications/Records
X☐ Permits to Operate (P/O)	☐ Site Inspection Reports (I/R)	☐ Facility Potential to Emit (PTE)
X☐ Equipment List Report (EQL)	☐ Emissions Summary	☐ Facility Positive Balance (NSR)
X☐ Notices of Violation (NOV)	☐ Source Test Reports (S/T RPTS)	☐ Toxic-Health Risk Assessment (HRA)
☐ Notices to Comply (N/C)	☐ Air Monitoring Data	☐ Other (describe below or on additional pages):

TIME PERIOD OF DOCUMENTS REQUESTED From: All To:

REQUESTED FACILITY INFORMATION (If Applicable)

FACILITY NAME: "BKK Carson Dump" aka "Victoria Golf Course"		
FACILITY ADDRESS: 340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street		
CITY: Carson	STATE: CA	ZIP CODE: 90746
FACILITY I.D. NO. (if known):	APPL. AND/OR PERMIT NO. (if known):	

***Direct cost of duplication**: $.15 per page for paper copies (first 10 pages free) and $5.00 per copied audio tape. No charge for copied Diskettes or CDs. Transfer of gathered electronic records onto CD or Diskette typically costs $10.00 each, but costs will vary (see Instructions for Requesting Records).*

☐ I wish to inspect the requested records, where applicable, or receive the requested records electronically at no charge. I do not want copies produced at this time.

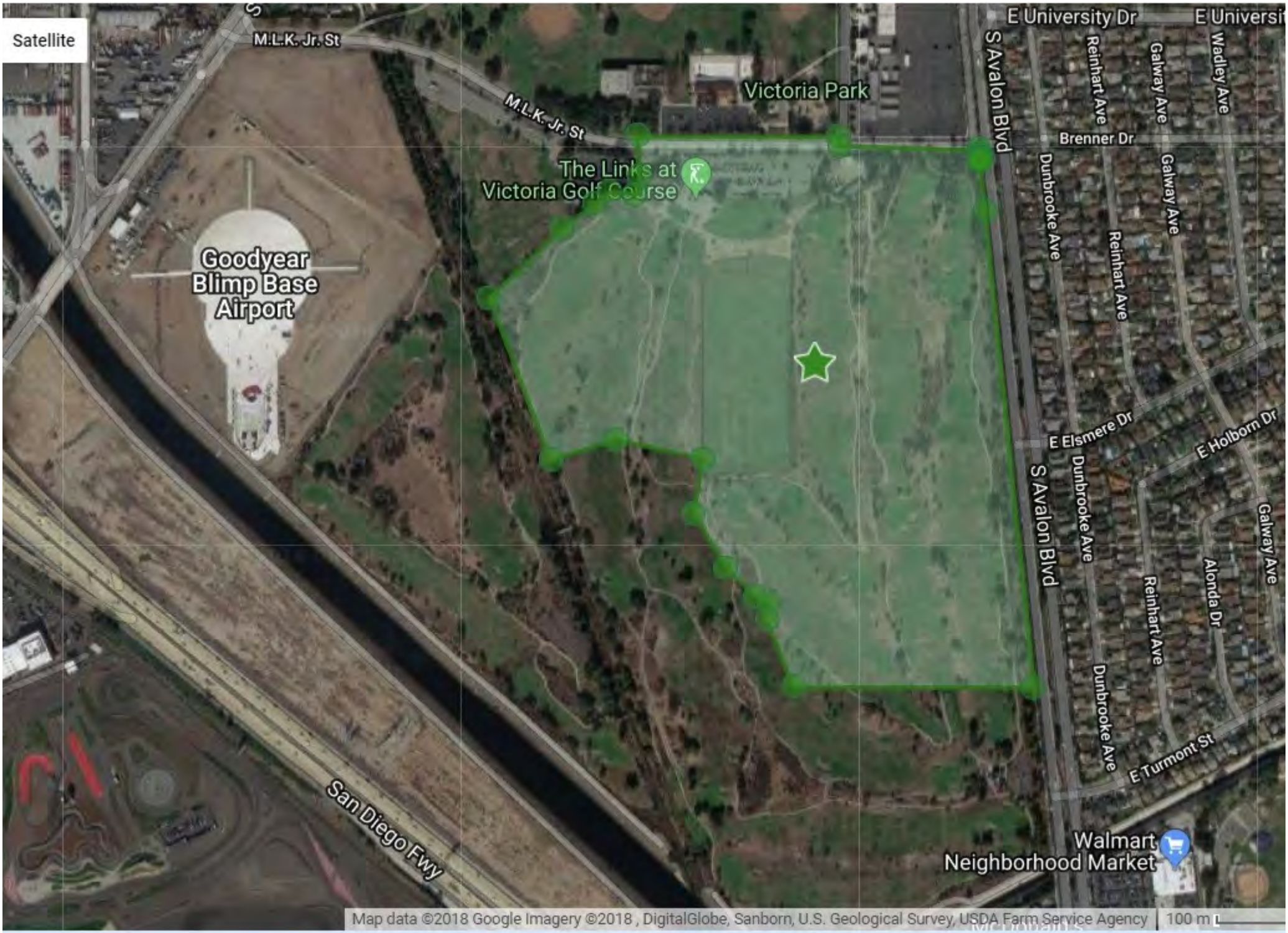
☐ I request that the SCAQMD contact me prior to copying the requested records if the cost exceeds $20.00.

X☐ I would like copies of the requested records and I hereby agree to reimburse the SCAQMD for the direct cost of duplication in accordance with Gov. Code Sec. 6253(b).

Shannon Castagno
Signature of Requestor

Note: After a preliminary estimate, advance payment may be required.

(Rev. 06/17/08-lkoenig)


Satellite
M.L.K. Jr. St
M.L.K. Jr. St
Victoria Park
The Links at Victoria Golf Course
Goodyear Blimp Base Airport
E University Dr
S Avalon Blvd
Reinhart Ave
Galway Ave
Wadley Ave
Brenner Dr
Dunbrooke Ave
E Elsmere Dr
E Holborn Dr
Alonda Dr
E Turmont St
San Diego Fwy
Walmart Neighborhood Market
Map data ©2018 Google Imagery ©2018 , DigitalGlobe, Sanborn, U.S. Geological Survey, USDA Farm Service Agency
100 m

Appendix J

Request for Records Search to the
Regional Water Quality Control Board – Los Angeles Region and
Photocopies Obtained from that Agency

Environmental Support Services
Environmental Research & Due Diligence Compliance
30251 Golden Lantern, #E-305, Laguna Niguel, CA 92677
Tel) 949-429-3564 • Fax) 949-429-3563
www.EnvironmentalSupportServices.com • Info@EnvironmentalSupportServices.com

May 30, 2018

Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Ste 200
Los Angeles, CA 91406

Attention: LUST/WIP/SLIC/Site Mitigation Divisions

Dear Personnel,

Please check for any files/information on the following site:

Site "BKK Carson Dump" aka "Victoria Golf Course"
340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street
Carson, CA 90746
APN 7339-017-917
(See Attached Map)

I would like to set up an appointment to review this file **as soon as possible**. Anything you can do to expedite this request would be greatly appreciated. Please call me at (949) 429-3564. Thanks!

Sincerely,
Environmental Support Services

Shannon Castagno

Shannon Castagno
Project Manager
Shannon@EnvironmentalSupportServices.com

Attachment 2

State Water Resources Control Board

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE
GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER

400416
50784

Ref: 400416
Date: 11/18/2009
WDID:4 19C356750

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM 1. [X] New Construction 2. [ ] Change of Information for W

II. PROPERTY OWNER

Name	Contact Person		
LOS ANGELES COUNTY	MR DAVID MESA		
Mailing Address	Title		
301 N. BALDWIN AVENUE	ARCHITECT		
City	State	Zip	Phone
ARCADIA	CA	91007	626-821-4647

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor	Contact Person		
VICO, LLC (COUNTY LESSEE)	TOM FROST		
Mailing Address	Title		
8640 E. RUSH STREET	LESSEE CONSULTANT		
City	State	Zip	Phone
ROSEMEAD	CA	91770	562-431-1700

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name	Site Contact Person		
VICTORIA GOLF COURSE	MEL MATSUKANE		
Physical Address/Location	Latitude	Longitude	County
340 E. 192nd STREET	33.856°	-118.271°	LOS ANGELES
City (or nearest City)	Zip	Site Phone Number	Emergency Phone Number
CARSON, CALIFORNIA	90746	310-323-4174	310-323-4174

A. Total size of construction site area: 2.19 Acres

B. Total area to be disturbed: 2.13 Acres (% of total _97%_)

C. Percent of site imperviousness (including rooftops):
Before Construction: 97 %
After Construction: 97 %

D. Tract Number(s): N/A

E. Mile Post Marker:

F. Is the construction site part of a larger common plan of development or sale?
[ ] YES [X] NO

G. Name of plan or development: N/A

H. Construction commencement date: TBD

I. % of site to be mass graded: 0%

J. Projected construction dates:
Complete grading: TBD Complete project: TBD

K. Type of Construction (Check all that apply):
1 [ ] Residential 2 [ ] Commercial 3. [ ] Industrial 4 [ ] Reconstruction 5 [ ] Transportation
6 [ ] Utility Description: GOLF COURSE 7 [X] Other (Please List): REPAVING OF AN EXISITNG PARKING LOT

V. BILLING INFORMATION

SEND BILL TO:	Name	Contact Person
[ ] OWNER (as in II above)		
[X] DEVELOPER (as in III above)	Mailing Address	Phone/Fax
[ ] OTHER (enter information at right)	City	State Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan? ☐ YES ☒ NO

Does the erosion/sediment control plan address construction activities such as infrastructure and structures? ☒ YES ☐ NO

Name of local agency: COUNTY OF LOS ANGELES

B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification? ☐ YES ☒ NO

If yes, provide details: _____

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):

1. ☐ **Indirectly to waters of the U.S.**
2. ☒ **Storm drain system - Enter owner's name:** COUNTY OF LOS ANGELES FLOOD CONTROL DEPARTMENT
3. ☐ **Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)**

B. Name of receiving water. (river, lake, creek, stream, bay, ocean): DOMINGUEZ CHANNEL

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)

☐ A SWPPP has been prepared for this facility and is available for review: Date Prepared: ___/___/___ Date Amended: ___/___/___

☒ A SWPPP will be prepared and ready for review by (enter date): 10/20/2009

☐ A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.

B. MONITORING PROGRAM

☐ A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.

If checked above. A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes ☐ YES ☐ NO

Name: _____ Phone: _____

C PERMIT COMPLIANCE RESPONSIBILITY

A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:

1 Preparing an annual compliance evaluation ☐ YES ☐ NO

Name: (TBD –WHEN CONSTRUCTION BID IS AWARDED) Phone: _____

2. Eliminating all unauthorized discharges ☐ YES ☐ NO

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal? ☒ YES ☐ NO

Have you included payment of the annual fee with this submittal? ☒ YES ☐ NO

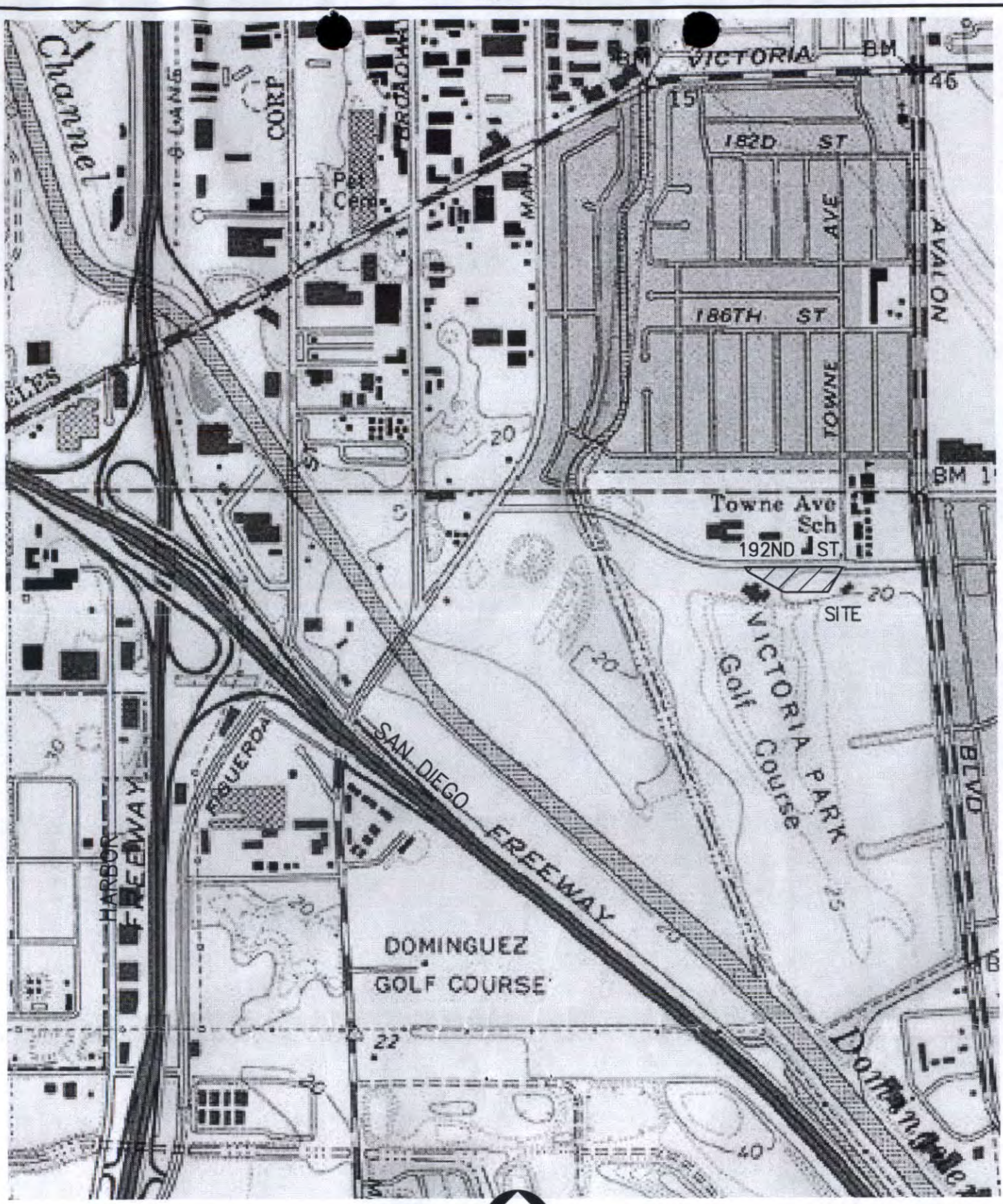
X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."

Printed Name: ANDREW NICKERSON

Signature: Andrew Nick David J. Mery. Date: 10-12-2009

Title: PROJECT MANAGER for LA COUNTY 10/29/2009



1000' 500' 0' 1000'

GRAPHIC SCALE

Note: For reduced sized prints, original scale is in inches

VICTORIA GOLF COURSE

VICINITY MAP
Exhibit

PSOMAS

DATE: 09-22-09 REVISED ON:

JOB No: 2VIC010100

SHEET 1 OF 1

Plotted:

THIS ITEM HAS BEEN SCANNED & ADDED TO

R:\Shared\Groundwater Permitting and Landfills Unit\SHARED\LANDFILLS\WMUs

IF YOU ARE ADDING FILES TO THIS FOLDER, PLEASE BE SURE TO SCAN THE NEW PAGES AND ADD THEM TO THE FOLDER PROVIDED ABOVE.

Remember to place this document at the top of the folder after you are finished scanning.

Thanks!

ATTENTION:

The Los Angeles Regional Water Quality Control Board has been implementing a Paperless Office system since November 1, 2011. The content of this folder, as well as any additional materials received thereafter for the case file, have been uploaded to the State Water Resources Control Board Geotracker website at:

http://geotracker.waterboards.ca.gov/

Such records may be accessed by searching the database with the facility name, address, or the following Global Number for the site: T10000006214.

California Regional Water Quality Control Board

Los Angeles Region

Peter M. Rooney
Secretary for Environmental Protection

Internet Address: http //www.swrcb.ca.gov .
101 Centre Plaza Drive, Monterey Park, California 91754-2156
Phone (323) 266-7500 • FAX (323) 266-7600

Pete Wilson
Governor

August 26, 1998

Mr. William D. Bates
Resources Engineering & Management
49 Cottage Lane
Aliso Viejo, CA 92656-4201

SITE GRADING – FORMER BKK CARSON LANDFILL, 19200 MAIN STREET, CARSON (FILE NO. 51-002)

Dear Mr. Bates:

We have reviewed your August 17, 1998, request on behalf of your client, Goodyear Tire & Rubber Company (Goodyear), to grade their property, the former BKK Carson Landfill, to promote drainage and prevent ponding on the landfill, while also grading to minimize hazards in the take off and landing of Goodyear's airship.

Plans for the grading show that there will be no excavation into the landfill or disturbance of the landfill cap, and are therefore approved as submitted.

Should you have any questions, please contact Blythe Ponek-Bacharowski at (323) 266-7580.

Sincerely,

Rodney H. Nelson

RODNEY H. NELSON
Senior Engineering Geologist
Groundwater Regulatory Unit

cc: Elizabeth Haven, State Water Resources Control Board
County of Los Angeles Department of Health Services, Solid Waste Management Division

RESOURCES
ENGINEERING & MANAGEMENT

REMCON@worldnet.att.net
49 Cottage Lane
Aliso Viejo, California 92656-4201
(949) 362-3954 (949) 362-0477 Fax

98GT001

August 17, 1998

Mr. Rod Nelson
Senior Engineering Geologist
Los Angeles Regional Water Quality Control Board
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

RE: The Goodyear Tire & Rubber Company - Airship Operations Property
19200 Main Street, Carson, California (mailing address - Gardena, CA 90248)
(BKK CARSON) FILE NO. 57-002

Dear Mr. Nelson:

Resources Engineering & Management (REM) has been retained by The Goodyear Tire & Rubber Company (Goodyear) to provide technical services in connection with a grading project at the referenced property. Mr William D (Denton) Bates, P.E. of REM will be responsible for overall project management and providing resident engineering services. Ledsam Contracting, Inc. (LIC A/B HAZ 622327) of Long Beach, California will perform the work.

As discussed with Ms. Blythe Ponek of your office in May 1998, the purpose of the site grading on this former BKK landfill site is to minimize hazards in the landing and take-off zones and is not intended for structural support. Further, the grading will restore original drainage patterns and thereby serve to mitigate some of the settlement problems that may have occurred as a result of ponding in surface depressions. The estimated in-place volume of fill to be placed is 11,840 cubic yards (CY). Please note that there will be no excavation (i.e. invasion of the landfill cover/cap) of the areas to be graded.

Pending approval of the permit application, work is expected to begin the last week of this month. Initial activities will consist of repairs to the asphalt-landing pad surrounding the existing concrete mooring pad. We anticipate that fill placement will be initiated the first week of September with all work completed by the end of December.

The grading plan, a copy of which is attached for your review, and permit application (GO9808030001) bas been submitted to the City of Carson. Mr. Mark White at (626) 458-4921 is reviewing the permit application for the City. He has requested that once we receive your review comments, we forward a copy to his attention as a part of the permit approval process.

Should you have any questions or require any additional information, please contact me at (714) 362-3954.

Sincerely yours,

RESOURCES ENGINEERING & MANAGEMENT

William D. Bates AKA Dutton Bates.

William D. Bates, P.E.
Project Manager

WDB:ib

cc: Ms. Jeri Trageser, The Goodyear Tire & Rubber Company
Mr. Don Ploskunak, Goodyear Airship Operations
Neil Rountree, Esq., The Goodyear Tire & Rubber Company

51-002

STATE OF CALIFORNIA—ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
101 CENTRE PLAZA DRIVE
MONTEREY PARK, CA 91754-2156
(213) 266-7500
FAX (213) 266 7600

July 23, 1997

Ms. Phelicia Gomes
Sapphos Environmental
505 S. DeLacey, Suite 210
Pasadena, CA 91105

INITIAL STUDY: REFURBISHMENT PROGRAM FOR VICTORIA COUNTY GOLF COURSE–BKK CARSON LANDFILL, UNINCORPORATED LOS ANGELES COUNTY (FILE NO. 51-002) (700.307)

On July 15, 1997, Regional Board staff received the above-referenced document.

The Regional Board has had little involvement with this site since we requested the submission of a groundwater Solid Waste Assessment Test (SWAT) proposal in 1988. To date, we have not received the final SWAT report, and the SWAT program is unfunded. Because we are unfamiliar with conditions at this landfill, we cannot comment on the Initial Study.

We understand that the California Department of Toxic Substances Control has current regulatory oversight on this landfill. The Initial Study should be referred to them for their review and comment.

Should you have any questions, please contact Blythe Ponek-Bacharowski at (213) 266-7580.

Rodney H. Nelson

RODNEY H. NELSON
Senior Engineering Geologist
Landfills Unit

cc. Elizabeth Haven, State Water Resources Control Board
Richard Hanson, County of Los Angeles Department of Health Services, Solid Waste Management Division
Teresa Hom, Department of Toxic Substances Control, Long Beach

COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION

INITIAL STUDY

LOCATION:
Victoria County Golf Course
Second Supervisorial District
Los Angeles County, California

PROPOSED PROJECT:
REFURBISHMENT PROGRAM FOR
VICTORIA COUNTY GOLF COURSE

PREPARED FOR:
State Lead Agency Pursuant to the California Environmental Quality Act
COUNTY OF LOS ANGELES DEPARTMENT OF PARKS AND RECREATION
433 S. Vermont Avenue
Los Angeles, CA 90020

PREPARED BY:
SAPPHOS ENVIRONMENTAL
50 S. DeLacey, Suite 210
Pasadena, California 91105

COORDINATED BY:
Mr. James Park
(213) 738-2965
August 1996

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SECTION 1.0
PROJECT INFORMATION

1. Project Title:	Refurbishments for Victoria Golf Course
2. Lead Agency Name and Address:	Los Angeles County Department of Parks and Recreation 433 South Vermont Ave. Los Angeles, California 90020
3. Contact Person and Phone Number:	Tom Dittmar (213) 738-2960
4. Project Location:	340 E. 192nd St. Carson, California 90746 USGS 7.5 Minute Series Long Beach, CA Quadrangle (Range 13 West, Township 4 South, Los Cerritos Land Grant Boundary)
5. Project Sponsor's Name and Address:	Arnold Palmer Golf Management Company 340 E. 192nd St. Carson, California 90746
6. General Plan Designation:	Open Space
7. Zoning:	No County Zoning Located within the City of Carson CG-D-ORL (Commercial General/Design Overlay Review/Organic Refuse Landfill)

8. Description of Project:

Arnold Palmer Golf Management Company is preparing to improve the existing Victoria Golf Course. The proposed improvements are expected to improve the quality of the golf course as well as the golfing experience of those using the course. These improvements are expected to address regional demand for golf facilities to accommodate an increased number of golf rounds per day. The project is designed to reconfigure the current course layout to a "links" type layout. The proposed improvements consist of two major components: (1) New Irrigation System, and (2) Golf Course Renovation.

The New Irrigation System includes installation of a new, centrally-operated, computer controlled irrigation system encompassing the entire golf course, driving range, and practice areas. The new system shall address the facility's "common area," which includes the clubhouse and parking lot grass and planter areas, all slope areas, and all perimeter and boundary areas along public streets and adjoining public and private property."

The goal of the Golf Course Renovation is to remediate problem areas of the golf course impacted by the negative effects of the landfill upon which a large part of the facilities are built. Specific components of the proposed renovation include: capping (minimum of 300,00 cubic yards) and recontouring the golf course to ensure proper drainage; regrade existing fairways and tees to include the addition of ten (10) to twelve (12) inches of topsoil (70,000 to 90,000 cubic yards); rebuild four greens using Bentgrass; remodel the driving range; install concrete cart paths; regrade and reseed all tees; remodel existing bunkers and install new bunkers; plant 30 acres of xeriscaping; provide new landscaping and irrigation along Avalon Boulevard; renovate the existing methane gas monitoring system; install methane gas collection systems and/or groundwater monitoring wells in accordance with regulatory agency requirements; and plant at least five hundred (500) new trees throughout the golf course.

The New Irrigation System and Golf Course Renovation would be completed within sixteen (16) months following initiation of construction.

9. Surrounding Land Uses and Setting:

Victoria Golf Course is located in Carson, California, and is bordered on the north by Victoria Community Regional Park. The Goodyear Airship Operations Center is located to the west of the golf course. Victoria Golf Course is bordered to the west by the Dominguez Channel. The golf course is bordered to the south by residential development and the San Diego Freeway (U.S. Interstate 405). The facility is bordered on the east by Avalon Boulevard and a residential area.

10. Other agencies whose approval is required:

County of Los Angeles Open Space and Conservation District (Funding)

Federal Environmental Protection Agency (Approved remediation plan for the existing subsurface methane prior to initiation of construction)

California Environmental Protection Agency (Approved remediation plan for the existing subsurface methane prior to initiation of construction)

South Coast Air Quality Management District

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages:

___	Land Use and Planning
___	Population and Housing
X	Geological Problems
X	Water
X	Air Quality
X	Transportation/Circulation
___	Biological Resources
___	Energy and Mineral Resources
X	Hazards
___	Noise
___	Public Services
___	Utilities and Service Systems
___	Aesthetics
___	Cultural Resources
X	Recreation
X	Mandatory Findings of Significance

Determination.

(To be Completed by the Lead Agency)

On the basis of this initial evaluation:

___ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

___ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

___ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

X I find that the proposed project MAY have a significant effect on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

___ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

James E. Park
Signature

9-16-96
Date

JAMES E. PARK
Printed Name

L.A. County Dept. of Parks & Rec.
For

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2.1. LAND USE AND PLANNING. Would the proposal:				
a) Conflict with general plan designation or zoning?	___	___	___	X
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	___	___	___	X
c) Be incompatible with existing land use in the vicinity?	___	___	___	X
d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	___	___	___	X
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	___	___	___	X
2.2. POPULATION AND HOUSING. Would the proposal:				
a) Cumulatively exceed official regional or local population projections?	___	___	___	X
b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	___	___	___	X
c) Displace existing housing, especially affordable housing?	___	___	___	X
2.3. GEOLOGICAL ISSUES. Would the proposal result in or expose people to potential impacts involving:				
a) Fault rupture?	___	___	___	X
b) Seismic ground shaking?	___	___	X	___
c) Seismic ground failure, including liquefaction?	___	___	X	___
d) Seiche, tsunami, or volcanic hazard?	___	___	___	X
e) Landslides or mudflows?	___	___	___	X

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?	___	X	___	___
g) Subsidence of the land?	___	X	___	___
h) Expansive soils?	___	___	___	X
i) Unique geologic or physical features?	___	___	___	X

2.4. WATER. Would the proposal result in:

a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	___	___	X	___
b) Exposure of people or property to water related hazards such as flooding?	___	___	___	X
c) Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?	___	___	X	___
d) Changes in the amount of surface water in any water body?	___	___	X	___
e) Changes in currents, or the course of direction of water movements?	___	___	___	X
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability?	___	___	___	X
g) Altered direction or rate of flow of groundwater?	___	___	X	___
h) Impacts to groundwater quality?[1]	___	___	X	___
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	___	___	___	X

2.5. AIR QUALITY. Would the proposal:

a) Violate any air quality standard or contribute to an existing or projected air quality violation?	X	___	___	___
b) Expose sensitive receptors to pollutants?	___	X	___	___

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Alter air movement, moisture, or temperature, or cause any change in climate?	___	___	___	X
d) Create objectionable odors?	___	___	___	X
2.6. TRANSPORTATION/CIRCULATION. Would the proposal result in:				
a) Increase vehicle trips or traffic congestion?	___	X	___	___
b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	___	___	___	X
c) Inadequate emergency access or access to nearby uses?	___	___	___	X
d) Insufficient parking capacity on-site or off-site?	___	___	X	___
e) Hazards or barriers for pedestrians or bicyclists?	___	___	___	X
f) Conflicts with adopted policies supporting alternative Transportation (e.g., bus turnouts, bicycle racks)?	___	___	___	X
g) Rail, waterborne or air traffic impacts?	___	___	___	X
2.7. BIOLOGICAL RESOURCES. Would the proposal result in impacts to:				
a) Endangered, threatened, or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	___	___	___	X
b) Locally designated species (e.g., heritage trees)?	___	___	___	X
c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?	___	___	___	X
d) Wetlands habitat (e.g , marsh, riparian, and vernal pool)?	___	___	___	X
e) Wildlife dispersal or migration corridors?	___	___	___	X
2.8. ENERGY AND MINERAL RESOURCES. Would the proposal:				
a) Conflict with adopted energy conservation plans?	___	___	___	X

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Use non-renewable resources in a wasteful and inefficient manner?	___	___	___	X
c) Result in the loss of availability of known mineral resource that would be a future value to the region and the residents of the State?	___	___	___	X
2.9. HAZARDS. Would the proposal involve:				
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals, or radiation)?	___	X	___	___
b) Possible interference with an emergency response plan or emergency evacuation plan?	___	___	___	X
c) The creation of any health hazard or potential health hazard?	___	___	___	X
d) Exposure of people to existing sources of potential health hazards?	___	X	___	___
e) Increased fire hazard in areas with flammable brush, grass, or trees?	___	___	___	X
2.10. NOISE. Would the proposal result in:				
a) Increases in existing noise levels?	___	___	X	___
b) Exposure of people to severe noise levels?	___	___	___	X
2.11. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a) Fire protection?	___	___	___	X
b) Police protection?	___	___	___	X
c) Schools?	___	___	___	X
d) Maintenance of public facilities, including roads?	___	___	___	X
e) Other governmental services?	___	___	___	X

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2.12. UTILITIES and SERVICE SYSTEM. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:				
a) Power or natural gas?	___	___	___	X
b) Communications systems?	___	___	___	X
c) Local or regional water treatment or distribution facilities?	___	___	___	X
d) Sewer or septic tanks?	___	___	___	X
e) Storm water drainage?	___	___	___	X
f) Solid waste disposal?	___	___	___	X
g) Local or regional water supplies?	___	___	___	X
2.13. AESTHETICS. Would the proposal:				
a) Affect a scenic vista or scenic highway?	___	___	___	X
b) Have a demonstrable negative aesthetic effect?	___	___	___	X
c) Create light or glare?[2]	___	___	X	___
2.14. CULTURAL RESOURCES. Would the proposal:				
a) Disturb paleontological resources?	___	___	___	X
b) Disturb archaeological resources?	___	___	___	X
c) Affect historical resources?	___	___	___	X
d) Have the potential to cause a physical change which would affect unique ethnic cultural values?	___	___	___	X
e) Restrict existing religious or sacred uses within the potential impact area?	___	___	___	X

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2.15. RECREATION. Would the proposal:				
a) Increase the demand for neighborhood or regional parks or other recreational facilities?	___	___	___	X
b) Affect existing recreational opportunities?[3]	___	___	X	___
2.16. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	___	___	___	X
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	___	___	___	X
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	___	___	___	X
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	___	X	___	___

1. Assumes that a Total Quality Management Program is instituted in accordance with the Regional Water Quality Control Board standards.

2. Depends if additional lighting is required by the project, and if so the location of the light.

3. Temporary closure of the existing course will interrupt current use.

SECTION 3.0
DISCUSSION OF ENVIRONMENTAL ISSUES

The goals in refurbishing Victoria County Golf Course include:

- Installing a new irrigation system to replace the existing system which has been extensively damaged and compromised by landfill subsidence that is believed to have ranged from several inches to several feet.
- Continue and potentially expand the existing methane gas collection system and install methane gas systems and/or groundwater monitoring wells in accordance with State and Federal Environmental Protection Agency recommendations for remediation of the site.
- Renovate the existing golf course to increase recreation and aesthetic values and partially accommodate the high level of demand that exists in the Service Area for this facility.

The existing irrigation system and landscaping program at Victoria County Golf Course appear to have been damaged as a result of subsidence and high levels of methane gas in the soil which result from the landfill. During the course of reviewing the environmental documentation prepared to comply with the California Environmental Quality Act for the nearby Carson Mall (parking lot) project, the federal EPA raised the classification of the landfill from "Low" to "Medium-High" priority for remediation. The results of ongoing monitoring indicate that subsurface methane levels range from "flammable" to "explosive."

Refurbishment of Victoria County Golf Course as described in *Facility Service Program for Refurbishment Program for Victoria County Golf Course* requires the import of up to 390,000 cubic yards of material. Imported material would be used to earthcap the landfill which is located under at least half of the golf course and provide topsoil for refinishing of tees, greens, and fairways. The Facility Service Program describes the requirement to implement methane gas and groundwater monitoring systems and methane gas collection systems to remediate the existing site conditions. Although, the exact parameters of those recommendations are unknown, it is anticipated that feasible measures for site remediation will be identified in that feasible measures were recommended and implemented for the Carson Mall parking lot project.

The discussion of environmental issues is based on the assumption that it is feasible to remediate the existing groundwater and methane gas site conditions related to the landfill to a level that would allow operation of a golf course that is safe, provides high recreation value, and is aesthetically pleasing. Remediation of the existing conditions may involve short-term significant impacts during construction related to the import and grading of up to 390,000 cubic yards of material. The following discussion of environmental issues is based in large part on the information contained in *Facility Service Program for Refurbishment Program for Victoria County Golf Course* prepared by the County of Los Angeles Department of Parks and Recreation (1996). Information obtained during a limited site reconnaissance at Victoria County Golf Course undertaken in July 1996 was essential in the consideration of the potential for impacts on land use and planning, air quality, transportation and circulation, and noise. These sources were supplemented with telephone conversations with the Toxic Substances Control Unit of the State Environmental Protection Agency and the City of Carson.

3.1 LAND USE AND PLANNING

The assessment of land use and planning is based on information for the study area documented in the *County of Los Angeles General Plan* (1980a) and the *County of Los Angeles Streamlined General Plan* (1993).

a. The Victoria County Golf Course Improvements would have no impacts in regard to conflicting with the current general plan designations for the Plan Area. The Land Use Policy designation is existing open space (Los Angeles County Department of Regional Planning 1980d) and urban open space (Los Angeles County Department of Regional Planning 1980b). The location of Victoria County Golf Course is within the City limits of Carson, and is zoned by the city as CG-D-ORL (Commercial General/Design Overlay Review/Organic Landfill). Several special-use permits were obtained by the County of Los Angeles Department of Parks and Recreation to develop the golf course, which is consistent with the City of Carson zoning requirements.

b. The Victoria County Golf Course improvements are not expected to conflict with applicable plans or policies adopted by local, State and Federal agencies with jurisdiction over the project. The lessee of the golf course shall be responsible for incorporation of all project components into the plans and specifications for the construction. These responsibilities include compliance with all applicable findings of future reports to be produced by the Federal Environmental Protection Agency and the California Department of Toxic Substances Control.

c. The Victoria County Golf Course improvements are expected to be compatible with existing land use in the vicinity. Existing land use is open space. Surrounding land uses include open space, major commercial, major industrial and low density residential. The improvements would promote conservation of open space for active recreation consistent with the goals and objectives of the *County of Los Angeles Streamlined General Plan* (1993) and *A Parks and Recreation Strategic Plan for 2010* (1992a).

d. The Victoria County Golf Course improvements would have no impact on agricultural resources. The land does not meet the criteria for Prime or Unique Farmland because it is located on a landfill. The golf course is not located within any County designated Special Management Areas.

e. The Victoria County Golf Course improvements would not divide or disrupt the physical arrangement of an established community. The proposed refurbishment of Victoria County Golf Course is contained within the footprint of the existing facility. Therefore, project improvements would not be expected to result in impacts on the physical arrangement of the community.

3.2 POPULATION AND HOUSING

The assessment of population and housing is based on information for the study area documented in the *County of Los Angeles Streamlined General Plan* (Los Angeles County Department of Regional Planning 1993) and the *County of Los Angeles General Plan* (Los Angeles County Department of Regional Planning 1980a) and the Southern California Association of Governments *Regional Comprehensive Plan* (1995)..

influence on the Victoria County Golf Course area. Faults with known surface expressions range in distance and direction from the site as follows: Palos Verdes (5-6 miles south/southwest), Santa Monica-Hollywood (15 miles northwest), Whittier (16 miles northeast), Elsinore (46 miles east), Elysian Park (12 miles north), San Andreas (47 miles northeast), and Newport-Inglewood (1-2 miles north/east). The Newport-Inglewood and Palos Verdes faults represent the greatest likelihood for generating groundshaking severe enough to approach or exceed 0.4g. Buried thrust faults (blind thrusts) may underlie most of the Los Angeles basin, including the site area, and pose a similar potential threat for severe shaking (Dolan, et al, 1995; Shaw and Suppe, 1996).

c. The improvements at Victoria County Golf Course would be expected to result in or expose people to potential seismic ground failure (settlement, ground cracking, ejection of sand and water), including liquefaction (Department of Planning, 1990, Plate 4). As documented by the seismic (safety) element, the site is underlain by alluvial units. Most of the site (at least the southern half) is underlain by potentially liquefiable young alluvium with a water table less than 30 feet. The northern portion of the site may be underlain by denser old alluvium/terrace deposits, and the water table may be deeper than 30 feet (Department of Regional Planning, 1990; Plate 3), therefore liquefaction potential may be nil. The Clubhouse appears to lie near the boundary between liquefaction and non-liquefaction prone areas. Above these natural deposits is estimated to be up to 30 feet (T. Hom, 1996, page 2) of a relatively low density landfill/soil material mixture. These materials are subject to dynamic compaction and settlement (due to densification) during strong, long duration ground shaking from local faults.

d. The improvements at Victoria County Golf Course would not be expected to result in or expose people to potential impacts involving seiche, tsunami, or volcanic hazard. Seiche (waves created in an enclosed body of water by seismic groundshaking) is not a potential hazard due to the lack of water bodies immediately upgradient from the site. Similarly, the site area is located sufficiently inland to be protected from potential impacts from a tsunami (a sea wave caused by underwater earthquakes or other seafloor dislocations). There are no active volcanic areas near Victoria County Golf Course.

e. The improvements at Victoria County Golf Course would not be expected to result in or expose people to potential impacts involving landslides or mudflows. According to previously completed geologic studies (Department of Regional Planning, 1990; Division of Mines, 1954; Ecology and Environment, 1989; ATC Environmental, 1996), the land areas within and surrounding Victoria County Golf Course are not subject to landslides or mudflows. This is due to both the massive, generally granular nature of the alluvial deposits and the low topographic relief.

f. The improvements at Victoria County Golf Course would be expected to result in changes in topography which would have potentially significant impacts to erosion potential and soil stability unless mitigations are incorporated. The applicant proposes to undertake grading involving an addition of 300,000 to 500,000 cubic yards of earth material. This grading (golf course renovation) will include substantial re-contouring of the golf course playing areas to provide an increased soil thickness as a protective barrier (cap) over the landfill waste materials, and as an uncontaminated substrate for new vegetation. Installation of the this engineered fill material should be in conformance with the Uniform Building Code, Los Angeles County Department of Public Works and City of Carson grading/earthwork requirements, standard engineering practice, and approved plans and specifications submitted by the applicant. In addition, compliance with California Code Regulations (CCR) Title 14, Division 7,

a. The proposed refurbishment of Victoria County Golf Course is intended to provide a facility that more adequately accommodates the demand for golf within the existing Service Area for this facility. The City of Carson is largely built out. Refurbishment of the golf course would not be expected to generate growth that would exceed official regional or local population projections.

b. The Victoria County Golf Course improvements are not expected to induce growth either directly or indirectly. The project location is in a largely built-out area of Carson and the improvements are taking place on an existing facility. This project will not impact any undeveloped areas.

c. The Victoria County Golf Course improvements will not displace any existing housing. All project elements are to take place on a currently existing golf course.

3.3 GEOLOGICAL ISSUES

The assessment of geological issues is based on information for the study area as documented in *Technical Appendix to the Safety Element of the Los Angeles County General Plan–HAZARD REDUCTION in LOS ANGELES COUNTY Volume 1* (Department of Regional Planning. 1990), *CERCLA Screening Site Inspection* (Ecology and Environment, 1989), *Environmental Considerations for Improvements, Victoria Golf Course, 340 East 192nd Carson, California* (ATC Environmental, 1996), *Geology of Southern California–Bulletin 170 Chapter II: Geology of the Natural Provinces* (Division of Mines, 1954), *Site Inspection Prioritization for Victoria Golf Course* (Bechtel Environmental, 1994), *Subsidence and Landfill Related Problems at Victoria Golf Course and Regional Park* (Department of County Engineer, 1978), and *Feasibility Report for the Proposed Golf Course at Victoria Regional Park* (Department of County Engineer, 1962). Other documents are referenced below and presented in the References Cited at the end of this document.

a. The improvements at Victoria County Golf Course would not be expected to result in or expose people to surface fault rupture. There are no fault zones mapped within the Victoria County Golf Course area and the area is not located within an Alquist-Priolo Earthquake Fault Zone as delineated (by Alquist-Priolo Special Studies Zone) in the Los Angeles County General Plan (Department of Regional Planning, 1990, Plate 1). Active faults within the Newport-Inglewood Fault Zone (the Avalon-Compton and Cherry Hill) lie about 1.2 miles north and 2.8 miles east of the site; movement of these faults has lead to the uplift of the Dominguez Hills immediately northeast of the site. Possible future uplift during local seismic events is not expected to pose a significant impact to the site.

b. Any substantial additions to, or remodeling of, the Victoria County Golf Course Clubhouse (built in the 1960s) or construction of other important or habitable structures associated with the golf course improvements must be in conformance with the Uniform Building Code, Los Angeles County Department of Public Works and City of Carson requirements, standard engineering/seismic design practice, and approved plans and specifications. This should ensure that such improvements at Victoria County Golf Course do not result in or expose people to potential impacts (severe damage or collapse) involving seismic ground shaking. There are several active faults within the region (Department of Regional Planning, 1990, Plate 1) capable of generating severe earthquakes that may have some

Chapter 3, Article 7.8, Sections 17778 and 17779 (ATC Environmental, 1996, page 11) should ensure that the drainage improvements at Victoria County Golf Course do not result in or expose people to potential impacts (uncovering and transporting waste material or contaminated soils) involving erosion, runoff, and changes in topography. Compliance with Article 7.8, Section 17796 (ATC Environmental, 1996, page 11) would allow for proper regulatory reviews and approvals. The level of compliance with Article 7.8, Sections 17773 (Final Cover) and 17774 (Construction Quality Assurance) shall be specified by the applicant in a manner to ensure that the grading improvements at Victoria County Golf Course do not result in or expose people to potential impacts involving changes in topography or unstable soil conditions from excavation, grading or fill. Important aspects addressed in these latter two Sections are the earthen cap/cover specifications including cover thickness, degree of compaction, and desired permeability.

g. The improvements at Victoria County Golf Course would be expected to result in or expose people to impacts involving local subsidence of the land unless mitigations are incorporated. Broader scale regional subsidence due to groundwater or hydrocarbon withdrawal, should it occur, will not adversely impact the site. The site area is underlain by both alluvium and landfill (solid waste/trash) materials placed in the 1940s and 1950s prior to todays stringent controls on solid waste compaction. There is evidence of past subsidence (Department of Parks and Recreation, 1977, page 1; Department of County Engineer, 1962 [page 2], 1978 [Figure 1]) across the site. Subsidence may vary from a few inches to a few feet depending upon the underlying thickness and density of the landfill materials. Most of the site observations are qualitative, with little documentation of the amounts and specific locations of subsidence. The 1978 report (Department of County Engineer, Figure 1) indicates most damage to golf course facilities was in the northeast 1/4 of the site. Local subsidence areas 4-5 feet deep were noted (Bechtel Environmental, 1994, page D-1; Dortch, 1977, page 1) The addition of a soil cap and the removal of methane gas from the waste would likely increase subsidence over what exists today. Compliance with the Article 7.8 sections described above should limit the adverse impacts from local subsidence in the golf course playing areas, with the main affects being on the irrigation system and surface drainage. The potential (if any) for subsidence in the Clubhouse area is the most critical should improvements be planned for this structure. Proper geotechnical investigation and remediation of any adverse conditions would be necessary.

h. The improvements at Victoria County Golf Course would not be expected to result in or expose people to impacts involving expansive soils. The nature of on site and imported soil materials which may be used in the construction of the artificial fill cap should be such that the resulting surface is more granular (sandy) in consistency. Proper specification of soils by the applicant and approval by the reviewing agencies can assure that surface soils would not be expansive.

i. There are no unique geologic or physical features within the Victoria County Golf Course area. The entire area has been disturbed by past landfilling which has destroyed any previously exposed physical or geologic features.

3.4 WATER

The environmental evaluation of water is based on information for the study area as documented in *An Investigation of Subsidence and Landfill Related Problems at the Victoria Golf*

Course and Regional Park (Project Planning and Pollution Control Division of the County of Los Angeles, Department of County Engineer February 1978), *Site Inspection Prioritization* (Bechtel March 23, 1994), *CERCLA Screening Site Inspection* (Ecology and Environment June 22, 1989), and *Environmental Considerations for Improvements Victoria Golf Course* (ATC Environmental Inc. May 5, 1996).

a. Implementation of improvements to the Victoria County Golf Course would result in impacts to absorption rates, drainage patterns, or the rate and amount of surface runoff. Placement and compaction of approximately 500,000 cubic yards of material and installation of new xeriphytic landscaping would result in a decrease in absorption rates and an increase in storm water runoff consistent with the objective of minimizing infiltration of rainfall and irrigation water into areas containing landfill material to minimize production of leachate. Grading required to reconfigure the golf course to a "links" type course would alter onsite drainage patterns. Control of surface runoff would consist of interception and conveyance of runoff in properly engineered devices to existing regional drainage facilities. Implementation of properly engineered drainage devices and incorporation of standard erosion control measures would ensure that impacts to absorption rates, drainage patterns or the rate and amount of surface runoff from site improvements are less than significant.

b. The improvement of the Victoria County Golf Course would not be expected to result in exposure of people or property to water related hazards such as flooding. The Dominguez Channel, which forms the southeast boundary of the Victoria County Golf Course, provides regional and local flood control for the project site. The site is not within an area subject to flooding hazard according to the Los Angeles County General Plan (1980b).

c. The improvement of the Victoria County Golf Course would not be expected to result in discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity). Placement and compaction of approximately 500,000 cubic yards of material and grading required to reconfigure the golf course to a "links" type course may have an impact on surface water quality due to storm water runoff. However, incorporation of standard erosion control measures, landscaping and properly engineered drainage devices would ensure that impacts to surface water quality are less than significant.

d. The improvement of the Victoria County Golf Course would not be expected to result in changes in the amount of surface water in any water body. No lakes or water hazards presently exist on the site and no lakes or water hazards have been identified as part of the proposed refurbishment of Victoria County Golf Course.

e. The improvement of the Victoria County Golf Course would not be expected to result in changes in currents, or the course of direction of water movements. Grading required to reconfigure the golf course to a "links" type course will alter onsite drainage patterns. However, the altered drainage patterns would be localized and the direction of runoff from the golf course area to adjacent drainage channels would not be substantially altered.

f. The improvement of the Victoria County Golf Course would not be expected to result in a change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge

capability. The site is not now a location where groundwater recharge takes place. The nature of the original landfill operation precludes the future use of the site as an area of groundwater recharge.

g. The improvement of the Victoria County Golf Course would not be expected to result in an alteration of the direction or rate of flow of groundwater. However, the Evaluation of the Victoria County Golf Course by the State Toxic Substances Control Board, which will define the course of action required to mitigate the potential impacts of leachate from the old landfill on groundwater, has not been completed as of this writing. The potential exists for implementation of a program of groundwater extraction for removal of contaminants. This could locally alter the direction and rate of flow of groundwater as a cone of depression is developed to capture contaminant plumes. This type of remedial action may have a minor impact on the water level and recharge rate of groundwater wells in the immediate vicinity (within approximately 1000 feet) of a future groundwater extraction system. However, this type of remedial action would not substantially alter the direction or rate of flow of regional groundwater aquifers, and would result in less than significant impacts.

h. The improvement and operation of the Victoria County Golf Course would not be expected to have a significant impact on groundwater quality. However, the existence of the landfill underlying the site does present the potential for significant impacts to groundwater quality, now and in the future, due to continuing production of leachate. Leachate produced in the old landfill can contain contaminants from materials now considered hazardous which has the potential to migrate into underlying groundwater aquifers. Infiltration of storm water and irrigation water from the golf course could increase the production of leachate in the old landfill materials. The proposed project incorporates measures designed to minimize infiltration. Placement and compaction of approximately 500,000 cubic yards of material and grading required to reconfigure the golf course to a "links" type course are proposed to improve surface drainage. Irrigation of the golf course is proposed to be reduced by approximately 40 percent by implementing state of the art technology for irrigation equipment, moisture sensing devices, and computerized control of the irrigation system. The Evaluation of the Victoria County Golf Course by the State Toxic Substances Control Board, which will define the course of action required to mitigate the potential impacts of leachate from the old landfill on groundwater, has not been completed as of this writing. The potential exists for implementation of a program of groundwater extraction for removal of contaminants which would improve groundwater quality. Due to the nature of the previous landfill activities on the golf course site, impacts to groundwater quality are potentially significant unless properly defined mitigation measures are incorporated into the proposed project

l. Grading and site preparation necessary to construct the proposed improvements at the Victoria County Golf Course and the subsequent operation of the golf course are not expected to reduce the amount of groundwater otherwise available for public water supplies. Potable water used for irrigation purposes is projected to be reduced by 40 percent, thereby increasing the potable water supplies available for domestic use.

3.5 AIR QUALITY

The assessment of air quality is based upon use of CEQA Guidelines (Appendix G) which indicate that a project will have a significant effect on air quality if it exceeds any air quality standard,

substantially increases an existing or projected exceedence, or exposes sensitive receptors to substantial pollutant concentrations.

The project site is located in the South Coast Air Basin, which is a non-attainment area for ozone, carbon monoxide, nitrogen dioxide, and fine particulate (PM_{10}). Data on existing air quality in the South Coast Air Basin is monitored by a network of air monitoring stations operated by the California Environmental Protection Agency (CalEPA), Air Resources Board (ARB), and the South Coast Air Quality Management District (SCAQMD).

a. The SCAQMD has adopted thresholds (SCAQMD 1993) to determine the significance of an air quality impact. These thresholds are based upon significance levels contained in the Federal Clean Air Act for extreme non-attainment for ozone. Different thresholds are given for operational emissions and construction emissions and the appropriate thresholds were used below to assess the potential significance of the project's emissions. Although the county now meets the national air quality standard for nitrogen dioxide, it is still designated a non-attainment area for the national standard for this pollutant, as well as for the state one-hour nitrogen dioxide standard. State and national ambient air standards are shown in Table 3.5-1.

TABLE 3.5-1
AMBIENT AIR QUALITY STANDARDS

State		National	
Air Pollutant	Standard	Primary	Secondary
Ozone	>0.09 ppm, 1-hr avg	>0.12 ppm, 1-hr avg.	0.12 ppm, 1-hr avg.
Carbon Monoxide	≥9.1 ppm, 8-hr avg >20 ppm. 1-hr. avg.	≥9.5 ppm, 8-hr. avg. >35 ppm, 1-hr. avg.	≥9 5 ppm, 8-hr. avg. >35 ppm, 1-hr. avg.
Nitrogen Dioxide	>0.25 ppm, 1-hr. avg.	>0.053 ppm, annual avg.	>0 053 ppm, annual avg.
Sulfur Dioxide	>.25 ppm 1-hr ≥0.05 ppm, 24-hr avg. with ≥0.10 ozone or with 24-hr TSP ≥100 ug/m^3	>0.03 ppm, annual avg. >0.14 ppm, 24-hr. avg.	>0.50 ppm, 3-hr. avg.
Suspended Particulate Matter (PM 10)	>50 ug/m^3, 24-hr. avg. >30 ug/m^3 annual geometric mean	>150 ug/m^3, 24-hr avg. >50 ug/m^3 annual arithmetic mean	>150 ug/m^3, 24-hr avg.; >50 ug/m^3 annual arithmetic mean
Sulfates	≥25 ug/m^3, 24-hr avg.		
Lead	≥1.5 ug/m^3, monthly avg.	>1.5 ug/m^3, calendar quarter	>1.5 ug/m^3
Hydrogen Sulfide	≥0.03 ppm, 1-hr avg.		
Vinyl Chloride	≥0.010 ppm, 24-hr avg.		
Visibility-Reducing Particles	In sufficient amount to reduce prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation		

Note: ppm = parts per million by volume
ug/m^3 = micrograms per cubic meter
> = greater than
≥ = greater than or equal to

Source: South Coast Air Quality Management District 1994

Construction.

The SCAQMD has determined that the following construction emissions constitute a significant air quality impact.

TABLE 3.5-2
SCAQMD CONSTRUCTION THRESHOLDS OF SIGNIFICANCE

POLLUTANT				
Carbon Monoxide (CO)	**Nitrogen Oxides (NOx)**	**Reactive Organic Compounds (ROC)**	**Sulfur Oxides (SOx)**	**PM10**
24.75 tons/quarter or 550 pounds on individual day	2.5 tons/quarter or 100 pounds on individual day	2.5 tons/quarter or 75 pounds on individual day	6.75 tons/ quarter or 150 pounds on individual day	6.75 tons/ quarter or 150 pounds on individual day

The transport, placement, and finish grading of 300,000 cubic yards of earthcap and 70,000 to 90,000 cubic yards of topsoil in support of the refurbishment program for Victoria County Golf Course would be expected to have a significant impact on air quality. Impacts are expected to be primarily related to air quality. Construction of the refurbishment program for Victoria County Golf Course will require grading and surface preparation of approximately 110 acres. The U.S. EPA estimates that each acre graded or exposed will release 26.4 pounds a day of PM10. Assuming that a maximum of 30 acres are exposed at one time, total daily PM10 emissions from grading and excavation will, without mitigation, equal 792 pounds per day.

Site preparation will be completed during the first six months of construction. Site preparation will involve the use of 300,000 cubic yards to earthcap the existing landfill (including import of 200,000 cubic yards of material and use of 100,000 cubic yards of material stockpiled onsite). An additional 70,000 to 90,000 cubic yards of topsoil will be imported for use in regrading existing fairways and tees to include the addition of ten (10) to twelve (12) inches of topsoil. This activity will add another 175 pounds/day of PM10, without mitigation.

Construction will require the following equipment: two rubber-tired loaders, 1 skip loader, one back hoe, and one tracked tractor. Assuming under worst case conditions that all equipment is in use simultaneously for 8 hours each day, equipment emissions are as follows: 16 pounds/day of CO, 6 pounds/day of ROC, 51 pounds/day of NOx, 5 pounds/day of SOx, and 4 pounds/day of PM10.

Ten construction workers are assumed to travel in individual vehicles for a distance of ten miles each way to and from the site each day during the construction period. Using SCAQMD emission factors for the year 1996, maximum emissions would be 5 (4.93) pounds/day of carbon monoxide. Emissions of all other pollutants would be less than 1 pound/day.

Total emissions of all pollutants except PM10 would be below SCAQMD thresholds on both a daily and quarterly basis.

TABLE 3.5-3
MAXIMUM DAILY CONSTRUCTION EMISSIONS
BY SOURCE CATEGORY
(in pounds per day)

SOURCE CATEGORY	POLLUTANT									
	Carbon Monoxide (CO)		Reactive Organic Compounds (ROC)		Oxides of Nitrogen (NOx)		Oxides of Sulfur (SOx)		Particulate Matter (PM10)	
Earthmoving/ Grading									792	
Diesel-Powered Equipment	16		6		51		5		4	
Employee Vehicles	4.93		0.30		0.36				0.05	
MAXIMUM DAILY CONSTRUCTION EMISSIONS	20.93		6.30		51.36		5 00		796.05	
SCAQMD Significance Thresholds for Construction	550 lb/day	24.75 T/Q	75 lb/day	2.5 T/Q	100 lb/day	2.5 T/Q	150 lb/day	6.75 T/Q	150 lb/day	6.75 T/Q
Significant?	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES

Construction PM-10 emission impacts will result in a significant impact requiring mitigation.

Mitigation measures are required for PM10 emissions. The Contract will employ all recommended AQMD procedures to reduce fugitive dust emissions during grading and dirt pushing operations. These measures include watering before grading to compact soil and twice daily watering of exposed surfaces to form a surface crust and prevent wind erosion. These measures will reduce PM10 emissions from grading and dirt pushing by 70%. Remaining PM10 emissions would be approximately 239 pounds/day which remains significant.

b. Towne Avenue Elementary School is located approximately 600 feet to the north of the proposed improvements and constitutes a sensitive air receptor.

c. Existing topography within the golf course ranges from 50 to 100 feet above mean sea level. The proposed golf course refurbishment would result in minor regrading and adjustment of existing contours which would not be expected to alter air movement, moisture, or temperature, or cause any change in climate.

d. The proposed refurbishment of the golf course includes repairs, replacement, and or additions of new components to the existing methane gas monitoring system; and installation of methane gas collection systems and/or groundwater monitoring wells as may be required by the State and Federal Environmental Protection Agency. Improvements to the methane gas monitoring and collection system are expected to reduce objectionable odors that currently exist at the site.

3.6 TRANSPORTATION/CIRCULATION

a. Access to Victoria County Golf Course is provided from the north via the 405 Freeway to 190th/Victoria Street east to Main Street, south to East 192nd Street and east to the parking lot. Access to from the south is provided from the 405 Freeway to Avalon Boulevard north to East 192nd Street and west to the parking lot. The import of 370,000 to 390,00 cubic yards of soil would require 24,375 truck trips over 132 working days during a six month site preparation and grading phase. This is the equivalent of 185 trucks per working day, or two truck loads per minute. The access and egress routes to Victoria County Golf Course also support the Carson Mall and California State University at Dominguez Hills. It is anticipated that the additional truck trips during AM and PM peak hour traffic would result in significant impacts on circulation requiring mitigation.

b. The proposed refurbishment of Victoria County Golf Course does not involve the alteration of existing roadway; therefore, construction and operation of the proposed improvements would not be expected to result in significant impacts on circulation involving hazards to safety from design features.

c. The proposed refurbishment would not alter existing emergency access or access to nearby uses.

d. The proposed refurbishment would accommodate an increased number of rounds of golf. Sufficient parking would be provided to meet County Code requirements pursuant to Title 22.

e. The proposed refurbishment would be contained with the footprint of the existing golf course; therefore, construction and operation of the proposed improvements are not expected to pose a hazard or barrier to pedestrians or cyclists.

f. The proposed refurbishment would not conflict with adopted policies of the County of Los Angeles *General Plan* related to alternative transportation.

g. The proposed refurbishment is not located in the vicinity of any rail, waterborne or air traffic or transportation facility. The proposed refurbishment is located immediately adjacent to the Goodyear Airship Operations Center. Construction of the proposed refurbishment would not be expected to result in adverse impacts on the Goodyear Airship Operations Center.

3.7 BIOLOGICAL RESOURCES

a. The improvements at Victoria County Golf Course are not expected to result in impacts to endangered, threatened, or rare species or their habitats. The 172 acres of the Victoria County Golf Course have been altered from their natural state and been fully developed as a County of Los Angeles Regional Park and Golf Course. No endangered, threatened, or rare species or their habitats occur on the site.

b. The improvements at Victoria County Golf Course are not expected to result in impacts to locally designated species such as heritage trees. No locally designated species occur on the site as a result of golf course landscaping and other past uses of the site.

c. The improvements at Victoria County Golf Course are not expected to result in impacts to locally designated natural communities. There are no locally designated natural communities that occur on the site due to development of the site for several other land-uses.

d. The improvements at Victoria County Golf Course are not expected to result in impacts to wetland habitat. Wetland habitat is absent from this site. The Dominguez Channel runs along the western edge of the site but is outside the golf course area, and has also been channelized.

e. The improvements at Victoria County Golf Course are not expected to result in impacts to wildlife dispersal or migration corridors. The area of the Victoria County Golf Course is surrounded by urbanization, and isolated from wildlife and migration corridors. With the exception of wildlife which has adapted to urbanized conditions, the golf course is not a viable transportation corridor which could be utilized by wildlife, largely due to surrounding development.

3.8 ENERGY AND MINERAL RESOURCES

a. The Victoria County Golf Course improvements would not be expected to conflict with adopted energy plans. Conservation of energy resources, consistent with the policies of the Conservation and Open Space Element of the County of Los Angeles *General Plan* (Los Angeles County Department of Regional Planning 1993 and 1980a) and applicable Title 24 Building Standards in accordance with the Southern California Association of Governments (SCAG) *Regional Comprehensive Plan and Guide* (SCAG 1995), will be incorporated in the proposed project. SCAG also provides guidelines for energy efficiency options which can be applied to the proposed project elements of the golf course improvements. These include infill construction; increased vehicle occupancy; pedestrian and bicycle emphasis; increased composting; and improved recycling efficiency (SCAG 1995).

b. The Victoria County Golf Course Improvements would not be expected to use non-renewable resources in a wasteful and inefficient manner. Use of non-renewable resources would be limited to construction needs in the project development phase.

c. The Victoria County Golf Course improvements would not be expected to result in the loss of availability of known mineral resources that would be of future value to the region and the residents

of the State. According to the Special Management Area Map of the County of Los Angeles *General Plan* (Los Angeles County Department of Regional Planning 1991f) there are no designated "mineral resource areas" on property located in Victoria County Golf Course. According to the map, there are also no designated special management areas within the park boundaries.

3.9 HAZARDS

The assessment of hazards is based on information for the study area as documented in *An Investigation of Subsidence and Landfill Related Problems at the Victoria Golf Course and Regional Park* (Project Planning and Pollution Control Division of the County of Los Angeles, Department of County Engineer February 1978), *Site Inspection Prioritization* (Bechtel March 23, 1994), *CERCLA Screening Site Inspection* (Ecology and Environment June 22, 1989), *Environmental Considerations for Improvements Victoria Golf Course* (ATC Environmental Inc. May 5, 1996), *Status Report - Methane Gas Hazard Victoria Park/Golf Course Synopsis 94* (Los Angeles County Department of Public Works February 6, 1987), and a *Letter to Mr. Terry McGuire, Superintendent of the Arnold Palmer Golf Management Company from David T. Jones, AQAC Supervisor of the South Coast Air Quality Management District dated September 21, 1994.*

a. The improvement of the Victoria County Golf Course would be expected to result in or expose people to a risk of accidental explosion or release of hazardous substances unless properly defined mitigation measures are incorporated into the proposed project. The installation of a protective earthen cap over much of the golf course area (see Section 3.3) has the potential to trap methane gas which has been, or may be, produced within the buried solid waste materials remaining from previous landfill operations. Buildup of these gases below the ground surface may cause an explosion or an uncontrolled release of methane and toxic materials to the atmosphere. Methane gas can also become trapped under building slabs, and paved areas where such a buildup may also result in explosion or uncontrolled releases to the atmosphere. Methane monitoring has been performed by the County of Los Angeles Department of Public Works since 1980, and quarterly reports have been made to the Los Angeles County Board of Supervisors and the City of Carson. Methane gas has been detected in the monitoring wells installed at the perimeter of the landfill in the past. As a result, methane sensors are presently installed at adjacent properties, including the golf course club house and Towne Avenue Elementary School to detect build up of methane gas. Installation of a methane extraction system and additional monitoring wells may be required at Victoria County Golf Course to mitigate methane gas migration. Continuation and possible expansion of the existing methane monitoring program will also be required.

No structural improvements are proposed for the golf course facility that would include aboveground or underground storage tanks of hazardous substances (including petroleum products), or facilities designed for the use, generation, or storage of hazardous materials of any kind (including explosives, hazardous chemicals, pesticides, or radioactive materials). Utilities are expected to be provided to the golf course in conformance with local, state, and federal regulations regarding the construction and safety of utility conduits.

b. The improvement of the Victoria County Golf Course would not be expected to result in the possible interference with an emergency response plan or emergency evacuation plan. Although the projected increase in the number of players will increase local traffic, the Victoria County Golf Course is not located in an area anticipated for use as an evacuation or emergency route for the general public.

c. The improvement of the Victoria County Golf Course would not be expected to result in the creation of any health hazard or potential health hazard. The Victoria County Golf Course would not be expected to create components with the potential to pose a risk to human health such as structures designed to use, store, or generate hazardous materials.

d. The improvement of the Victoria County Golf Course would be expected to result in the exposure of people to existing sources of potential health hazards to adjacent sensitive receptors, golf course employees, and players unless mitigation measures are incorporated into the project. The Victoria County Golf Course operations activities require the use and storage of certain chemicals, specifically fertilizers and insecticides. All existing transport, handling, and storage of these chemicals is subject to compliance with local, state, and federal regulations and statutes. Use and disposal of these chemicals is also subject to compliance with local, state, and federal regulations and statutes. The presence of a landfill beneath the site raised the possibility that toxic substances may be released to the surface either during the construction process, or natural events such as earthquakes, erosion due to severe surface runoff, or subsidence. Mitigation measures can be implemented to reduce the likelihood that these natural events will cause such releases (see Section 3.3).

Uncontrolled releases of landfill gases and hazardous substances previously buried at the site may be a source of potential health hazards unless mitigation measures are incorporated in the project. Safeguards can be implemented during construction to minimize the potential for uncontrolled releases of these substances. Installation of a methane extraction system and continuation and/or expansion of the methane monitoring program could mitigate the potential health hazards to adjacent sensitive receptors, golf course employees, and players.

e. The improvement of the Victoria County Golf Course would not involve potentially significant increases in fire hazard in areas with flammable brush, grass, and trees. The proposed revegetation would result in the use of xeriscape landscape materials which consist of low water using ground cover, grasses, and trees which should not change the existing potential for fire hazard.

3.10 NOISE

The assessment of noise is made in accordance with CEQA (Appendix G) which defines a significant noise impact as one that substantially increases ambient noise levels. State Noise Guidelines indicate that CNEL levels (which are a measurement of individual sounds averaged over a given period within a defined location) of 60 or lower are acceptable. The project will not use construction equipment that averages over 75 dBA at 50 feet. Without any additional reduction that occurs because of terrain, wind direction, or natural or man-made barriers. sound will decrease by 6 dBA with each doubling of distance. Land uses determined to be "sensitive" to noise by the State of California include schools, hospitals, rest homes, long term care and mental care facilities. The nearest sensitive receptor is located approximately 600 feet away to the north.

a. The Victoria County Golf Course improvements would be expected to result in less than significant impacts on existing noise levels. Construction of the project elements at the northern boundary of the course are located approximately six hundred feet from the nearest sensitive receptor. The nearest sensitive receptor, Towne Avenue Elementary School, is located to the north of the golf course across East 192nd Street. At that distance, noise levels from construction should be below the state recommended guidelines of 65dBA.

b. The Victoria County Golf Course improvements would not be expected to expose people to severe noise levels. All construction would be conducted in compliance with the *Noise Control Ordinance of Los Angeles County*. The following construction noise restrictions would be required of the project activities: (1) Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7 pm and 7 am, or at any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited; (2) Construction activities would be conducted in such a manner that the maximum noise level at residential structures will not exceed 60 dBA for single-family dwellings, daily, except Sundays and legal holidays, 7 am to 8 pm. Maximum noise levels will not exceed 50 dBA daily, 8 pm to 7 am and all day Sunday and legal holidays; (3) All mobile or stationary internal-combustion-engine powered equipment or machinery would be equipped with suitable exhaust and air-intake silencers in proper working order; and (4) In case of a conflict between this noise ordinance and any other ordinance regulating construction activities, provisions of any specific ordinance regulating construction activities would control.

3.11 PUBLIC SERVICES

a. The Victoria County Golf Course improvements would not be expected to have any impact on government services regarding fire protection. Golf Course improvements would be undertaken within the pre-existing facility and no increased demand for fire services would be expected. The Golf Course would be continued to be served by Station 116 of the City of Carson Fire Department.

b. The Victoria County Golf Course improvements would not be expected to result in the need for new or altered government services regarding police protection. The project improvements would be undertaken within the existing golf course facility and no increased demand for police services would be expected result.

c. The Victoria County Golf Course improvements would not be expected to have an effect upon, or result in the need for new or altered government services regarding schools. The project improvements would be undertaken within the existing golf course facility and no altered demand for government services regarding school services would be expected.

d. The Victoria County Golf Course improvements would not be expected to have an effect upon, or result in the need for new or altered government services regarding maintenance of public facilities, including roads. The project improvements would be undertaken within the existing golf course facility and therefore no impact on maintenance of public facilities would be expected.

e. The Victoria County Golf Course improvements would not be expected to have an effect on any other governmental services. Arnold Palmer Golf would be responsible for property management at the project site.

3.12 UTILITIES AND SERVICE SYSTEMS

a. The Victoria County Golf Course improvements would not be expected to result in the need for new systems or supplies, or substantial alterations to the power or natural gas utilities. The improvements would not be expected to require additional natural gas systems or supplies beyond the capacity of the existing infrastructure at the course.

b. The Victoria County Golf Course improvements would not be expected to result in the need for new systems or supplies, or substantial alterations to communications systems. The improvements would not be expected to require additional communications systems or supplies beyond the capacity of the existing infrastructure at the course.

c. The Victoria County Golf Course improvements would not be expected to result in the need for new systems or supplies, or substantial alterations to local or regional water treatment or distribution facilities. The proposed, centrally-operated, computer-controlled irrigation system would be designed to use less irrigation water than is currently used. Therefore, the improvements would not be expected to require additional water treatment or distribution facilities beyond the capacity of the existing infrastructure at the course.

d. The Victoria County Golf Course improvements would not be expected to result in any impact on existing sewer lines. The improvements would not be expected to require additional sewage systems beyond the capacity of the existing infrastructure at the course.

e. The Victoria County Golf Course improvements would not be expected to result in any impact on storm water drainage. The improvements would not be expected to require additional storm water drainage systems beyond the capacity of the existing drainage structures.

f. The Victoria County Golf Course improvements would be expected to result in a less than significant impact on solid waste disposal. The improvements would not be expected to result in additional solid waste disposal beyond the capacity of the existing waste disposal facilities at the course.

g. The Victoria County Golf Course improvements would not be expected to result in any impact or need for new systems or supplies, or substantial alterations to local or regional groundwater supplies. The improvements would not be expected to result in any alterations to existing groundwater conditions.

3.13 AESTHETICS

a. The improvements at Victoria County Golf Course would not be expected to have an impact on scenic vistas or scenic highways. No adopted, first priority, or second priority scenic routes as designated in the *Los Angeles County General Plan* exist in the vicinity of the project area. The three main roads surrounding the Victoria County Golf Course are the San Diego Freeway, Main Street, and Avalon Boulevard which are designated as expressway/freeway and routes to serve as highway connections of major significance, respectively. The Improvements at Victoria County Golf Course will preserve open space areas on County owned land adjacent to these roadways.

b. The improvements at Victoria County Golf Course would not be expected to have a demonstrable negative aesthetic effect. The improvements would preserve the open space area and increase its aesthetic characteristics. The reseeding of all tees, the regrading of existing fairways, the planting of thirty acres of xeriscaping plantings, and the planting of at least five hundred (500) new trees throughout the course would be expected to improve the aesthetic quality of the site.

c. The improvements at Victoria County Golf Course would result in a less than significant impact on creating light or glare. No residential areas are located immediately adjacent to the golf course. Currently, plans for incorporating lighting for night use of the golf course have not been included in the improvements. Any potential lighting to be incorporated into future improvements of Victoria County Golf Course would need to be considered separately.

3.14 CULTURAL RESOURCES

a. The proposed improvements are primarily located over a landfill which was operated over an approximately 50 year period of time. It is expected that the landfill operations would have buried any important paleontological resources. The proposed refurbishment of the golf course would not involve grading below the landfill material; therefore there is no anticipated disturbance of paleontological resources. The County will provide a query letter to the County of Los Angeles Museum of Natural History during preparation of subsequent environmental analysis.

b. It is expected that any prehistoric archeological material would have been disturbed during construction and operation of the landfill. The presence of extant archeological materials is not expected. The County will review literature and archival records available through the University of California at Los Angeles Archeological Information Service during preparation of subsequent environmental analysis to verify that there are no known prehistoric archeological resources at the Victoria County Golf Course.

c. There is no surface evidence of historic structures at the Victoria County Golf Course. The County will review literature and archival records available through the University of California at Los Angeles Archeological Information Service during preparation of subsequent environmental analysis to verify that there are no known historic archeological resources at the Victoria County Golf Course.

d. The proposed refurbishment of the Victoria County Golf Course is consistent with its existing use as a golf course; therefore there are no anticipated significant impacts on cultural resources related to unique ethnic cultural values.

e. The proposed refurbishment of the Victoria County Golf Course is consistent with its existing use as a golf course; therefore there are no anticipated significant impacts on cultural resources related to restricting religious or sacred uses within the potential impact area. The County will provide all CEQA documentation related to the proposed project to Office of Planning and Research for coordination with the Native American Heritage Commission.

3.15 RECREATION

The evaluation of impacts on recreational facilities and opportunities is based on a review of local and regional maps of recreation facilities, the *Los Angeles County General Plan* (1980), and the documents referenced below.

a. The improvements at Victoria County Golf Course would not be expected to increase the demand for neighborhood or regional parks or other recreational facilities. In fact, improvement of the Victoria County Golf Course will ameliorate the existing demand for regional recreational facilities, in particular those furnishing golf courses. Currently there is a deficiency of 26 golf courses throughout Los Angeles County, as described in the *Needs Study of County Park Lands* (1991) prepared by the County of Los Angeles Department of Parks and Recreation Central Office Planning Division. According to *A Parks and Recreation Strategic Plan for 2010* (1992), also prepared by the County of Los Angeles Department of Parks and Recreation, by the year 2010 a deficiency of 49 golf courses will exist based on the County standard of one 18-hole golf course for each 90,000 residents. The priority for acquisition and development of additional golf courses throughout the County is identified as being high. In face of increasing population densities and decreasing areas of large land tracts suitable for golf course, the improvements at Victoria County Golf Course would be expected to partially accommodate the existing unmet demand for this type of recreational facility.

b. The improvements at Victoria County Golf Course would be expected to result in less than significant impacts on existing recreational opportunities. Improvements will result in a sixteen (16) month period during which all construction is to take place and the regular functioning of the golf course interrupted. Accomplishment of the proposed improvements would mitigate short-term construction impacts related to closure. In an effort to mitigate the interruption of golf play, it is recommended that signs indicating the next nearest County golf course facilities be clearly posted for the benefit of regular users of this course.

SECTION 4.0
REFERENCES

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United States Department of Agriculture Soil Conservation Service. 1967. *Report and General Soil Map Los Angeles County, California.* Revised December 1969.[1]

United States Geological Survey. 1981. 7.5 Minute Series Topographic Long Beach Quadrangle.

1. Reference on file at Sapphos Environmental, 50 South DeLacey Street, Suite 210, Pasadena, California, 91105.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, California 94105

RECEIVED
94 APR -6 PM 1:35

CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

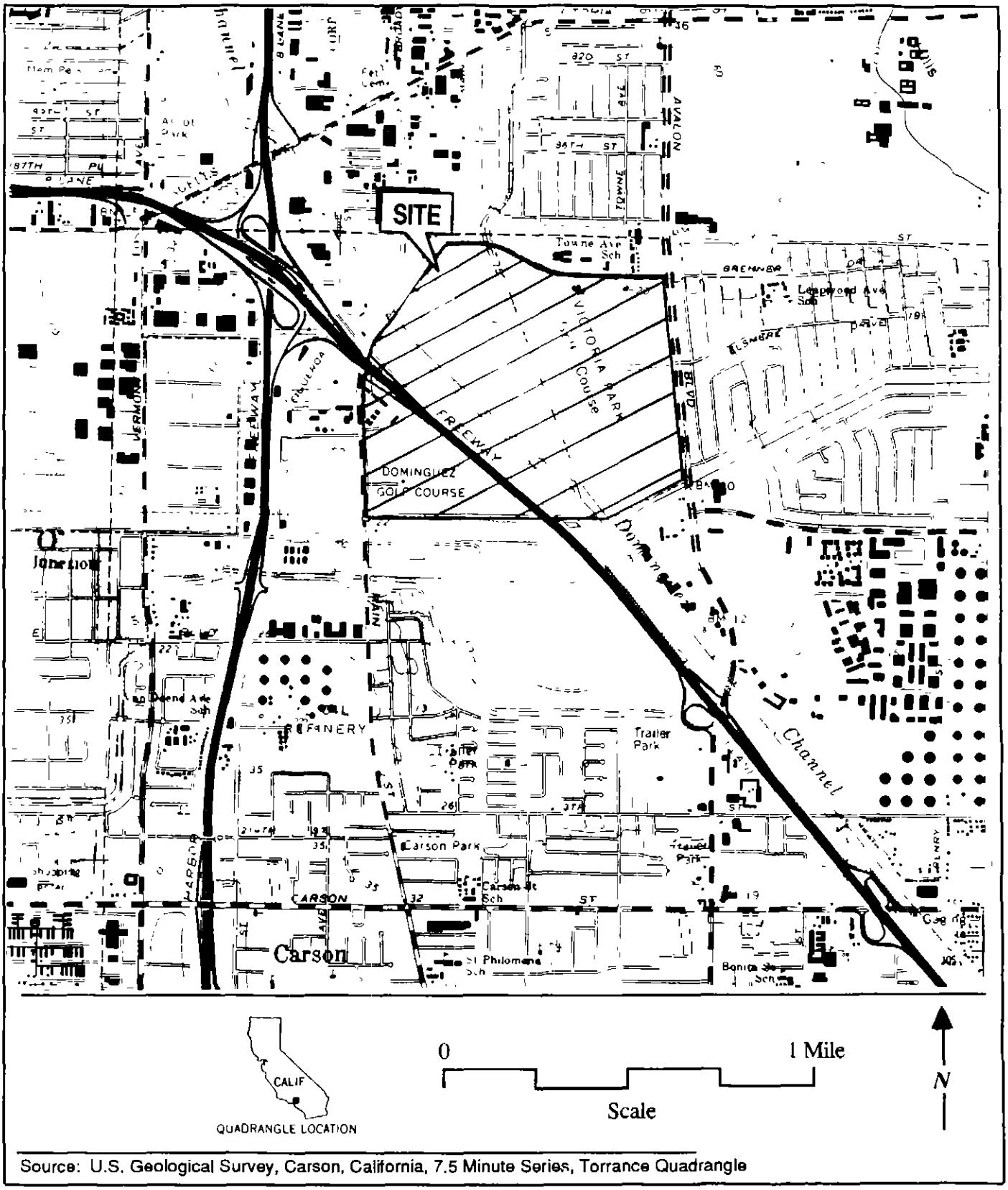
Dear Sir/Madam:

Enclosed please find the Site Assessment report prepared for EPA concerning the CERCLA evaluation for this site.

EPA encourages your written comments on this report. Your comments should be sent to Jim Quint, Site Assessment Manager, EPA mail stop H-8-1. If you have any questions please contact him at (415)744-2346.

Sincerely,

Thomas A. Mix, Chief
Site Evaluation and Grants Section



Source: U.S. Geological Survey, Carson, California, 7.5 Minute Series, Torrance Quadrangle

Figure 1-1 Site Location

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA), Region IX, under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), has tasked Bechtel Environmental, Inc. (BEI) to conduct a site inspection prioritization (SIP) of the Victoria Golf Course site in Carson, Los Angeles County, Calif., using the EPA's Hazard Ranking System (HRS) criteria. The HRS assesses the relative threat associated with actual or potential releases of hazardous substances at the site The HRS has been adopted by the EPA to help set priorities for further evaluation and eventual remedial action at hazardous waste sites. The HRS is the primary method of determining a site's eligibility for placement on the National Priorities List (NPL). The NPL identifies sites at which the EPA may conduct remedial response actions. This report summarizes the results of the SIP of the Victoria Golf Course site.

The geographic coordinates of the site are 33° 51' 26.0" N latitude and 118° 16' 49.5" W longitude (Township 4 South, Range 13 West, Section 5, Mount Diablo Baseline and Meridian, Torrance Quadrangle, Calif., 7.5-minute quadrangle). (1) The location of the site is shown in Figure 1-1.

The Victoria Golf Course site was identified as a potential hazardous waste site and entered into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) on June 1, 1981 (CAD 980818926) (2). A site inspection (SI) of the site was conducted for the EPA by Ecology and Environment, Inc. on September 8, 1989 (3).

1.1 Apparent Problem

- Hazardous wastes, including liquid hazardous wastes, were disposed of at a landfill that operated on site from 1949 to 1959 (3).
- Vinyl chloride; benzene; tetrachloroethene, also known as perchloroethylene (PCE); and trichloroethylene (TCE) were detected in samples collected from onsite landfill gas monitoring wells during the air Solid Waste Assessment Test (SWAT) conducted in 1988 by SCS Engineers (4).

2.0 SITE DESCRIPTION

The 348-acre site was used as a Class II and Class III landfill known as the Ben K. Kazarian (BKK) Carson Dump, from 1949 to 1959 (3). The landfill is closed and is now overlain by the Victoria Golf Course, a portion of the Victoria Regional Park, the Dominguez Golf Course, the Goodyear Tire and Rubber Blimp Base, and the 65-unit Don Dominguez Apartments (5, 6). The 200-acre Victoria Golf Course is owned by the County of Los Angeles, and leased and operated by National Golf and Tennis (5).

The BKK Carson Dump accepted municipal and hazardous wastes, including liquid hazardous wastes. Steel mill slag; metals, such as magnesium and lead; paint sludges containing lead, cadmium and chromium; drilling muds and wastes; petroleum production tank cleanings; acetylene sludge; synthetic silicate catalyst; liquid latex wastes; ceramic plant wastes; printers ink; solvents; and refinery still bottoms containing lead were permitted for disposal at, or were known to have been disposed of at, the landfill on site. The total waste quantity and the amount of material considered hazardous under CERCLA are unknown; however, an estimate of 3 million to 5 million tons of waste was calculated in a groundwater SWAT proposal for the site, based on the operating conditions of the BKK Carson Dump industrial waste permit. (3)

3.0 SITE INSPECTION PRIORITIZATION CONSIDERATIONS

During the air SWAT conducted by SCS Engineers at the Victoria Golf Course portion of the site during February and July 1988, a total of thirteen 24-hour and less-than-24-hour ambient air samples were collected at sampling stations located upwind and downwind of the site, in compliance with California Health and Safety Code Section 41805.5 (Calderon) and the State Air Resources Board Testing Guidelines for Active Solid Waste Disposal Sites. Analytical results from the less-than-24-hour samples indicated the presence of vinyl chloride at concentrations up to 2.4 parts per billion (ppb) at the downwind sample locations. Vinyl chloride was not detected in samples from any of the upwind sample locations. In addition, analytical results of an integrated surface air sample and samples taken from an onsite landfill gas monitoring well indicated the presence of vinyl chloride at concentrations up to 7.71 ppb, and 2,290 ppb, respectively. (4)

The California Environmental Protection Agency, Regional Water Quality Control Board (RWQCB), Los Angeles Region, has had limited involvement with the site since it requested the submission of a groundwater SWAT proposal in 1988 (3). To date, the RWQCB has not received the final groundwater SWAT (7). The County of Los Angeles, Department of Public Works (DPW), has conducted quarterly monitoring for subsurface methane migration at the Victoria Golf Course and throughout the city of Carson, since 1980 (4). Currently, the DPW analyzes samples from the landfill gas monitoring wells for methane only (8).

The County of Los Angeles, Department of Parks and Recreation (DPR), has proposed the initiation of a number of environmental studies at the Victoria Golf Course. The purposes of the studies would be to investigate alternatives for improving the irrigation system, determine the boundaries of the former BKK Carson Dump, and research the possible installation of a gas collection system. The DPR proposals have been sent to the South Coast Air Quality Management District (SCAQMD) for approval; however, at the present time, the DPR has had no response from the SCAQMD. (5, 9)

In 1980, the DPW completed an air SWAT and a site evaluation of the Goodyear Tire and Rubber Blimp Base portion of the site. SCS Engineers was hired to conduct a Phase 1 assessment, make recommendations for environmental compliance, and develop a prospectus for future site development. The report documenting specific activities of the 1980 evaluation, however, was not available at the time of the SIP. (10)

4.0 PERTINENT HAZARD RANKING SYSTEM FACTORS

The following pertinent Hazard Ranking System factors are associated with the site:

- Vinyl chloride, benzene, PCE, and TCE were detected in samples collected from onsite landfill gas monitoring wells during the 1988 air SWAT.
- The Bellflower aquitard is less than 90 feet below ground surface at the Victoria Golf Course site and is thought to be hydraulically interconnected with both the Lynwood and Silverado aquifers.
- Approximately 74,000 people are served by drinking water wells located within 4 miles of the site and screened in the Lynwood and Silverado aquifers.
- The groundwater SWAT proposal estimated that 3 million to 5 million tons of waste were deposited at the former landfill on site.

51-02
A133 0010
VKK - Carson

Bechtel

50 Beale Street
San Francisco, CA 94105-1895
Mailing address P.O. Box 193965
San Francisco, CA 94119-3965

Site Inspection Prioritization

Site: Victoria Golf Course
340 East 192 St.
Carson, CA 90746

Site EPA ID Number: CAD 980818926

Work Assignment Number: 60-32-9JZZ, ARCSWEST Program

Submitted to: Michael Bellot
Site Assessment Manager
EPA Region IX

Thru: Sandra Carroll

Date: March 23, 1994

Prepared by: Jordie Bornstein

Review and Concurrence: Michele Dermer

Bechtel Environmental, Inc.

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CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IX

Site Name: Victoria Golf Course **EPA ID#:** CAD 980818926

Alias Site Names: —

City: Carson **County or Parish:** Los Angeles **State:** CA

Refer to Report Dated: 3/23/94 **Report type:** Site Inspection Prioritization

Report developed by: Bechtel Environmental, Inc.

DECISION:

| | 1. **Further Remedial Site Assessment under CERCLA (Superfund) is not required because:**

| | 1a. Site does not qualify for further remedial site assessment under CERCLA (Site Evaluation Accomplished - SEA)

| | 1b. Site may qualify for further action, but is deferred to: | | RCRA | | NRC

|✓| 2. **Further Assessment Needed Under CERCLA:** 2a. (optional) Priority: |✓| Higher | | Lower

2b. Activity Type: | | PA |✓| ESI | | SI | | HRS evaluation

| | Other: _____

DISCUSSION/RATIONALE: Further action required due to possible exposure to large populations. MHB

Report Reviewed, Approved, and Site Decision Made by: Michael E. Beller **Signature:** Michael E. Beller **Date:** 3/25/94

APPENDIX A

REFERENCE LIST

Site: Victoria Golf Course

1. U.S. Geological Survey, Torrance Quadrangle, California, 7.5-Minute Series (topographic), Photorevised 1981.

2. U.S. Environmental Protection Agency, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), January 4, 1994.

3. Wise, Robert L., Ecology and Environment, Inc., CERCLA Screening Site Inspection, Victoria Golf Course, June 22, 1989.

4. SCS Engineers, Air Quality Solid Waste Assessment Test Report, Victoria Regional Park and Golf Course, November 1988.

5. Bornstein, Jordie, Bechtel Environmental, Inc., Site Reconnaissance Interview and Observations Report, February 23, 1994.

6. Manager, Don Dominguez Apartments, Telephone conversation recorded on Contact Log, February 24, 1994.

7. Nelson, Rod, California Environmental Protection Agency, Regional Water Quality Control Board, Los Angeles Region, Telephone conversation recorded on Contact Log, January 20, 1994.

8. Mohajer, Mike, County of Los Angeles, Department of Public Works, Telephone conversation recorded on Contact Log, February 15, 1994.

9. Ludvik, William, County of Los Angeles Internal Services Department, Letter report entitled Victoria Park and Golf Course Gas Migration System and Irrigation Improvements, to Peter Bogue, Los Angeles County Department of Parks and Recreation, November 14, 1991.

10. Zieg, Steve, SCS Engineers, Letter (with attachment) to Peter Bogue, County of Los Angeles, Department of Parks and Recreation, February 22, 1993.

APPENDIX B

CONTACT LOG

Site: Victoria Golf Course

EPA ID: CAD 980818926

Name	Affiliation	Phone	Date	Information
Receptionist	Victoria Golf Course, Main Office	(310) 323-6981	1/20/94	The new superintendent is Jerry Wolfanden, who apparently supervises a number of courses in the area. Left a message for him to call me.
Ron Gastelum	Ben K. Kazarian (BKK) Corporation	(310) 539-7150	1/20/94	Since the property is owned by the County of Los Angeles, BKK Corporation has deferred to the County. BKK Corporation was involved with the Victoria Golf Course only insofar as it did some brainstorming with the RWQCB a while ago. BKK Corporation is currently not involved with the site in any way. BKK Corporation would become involved with the site only if the County litigated, of which Mr. Gastelum has heard nothing to date.
Information Operator	Telephone Company	(213) 555-1212	1/20/94	No phone number for Bryan Striatt and Associates in Los Angeles area code 213.
Jenny Au	California Environmental Protection Agency, Regional Water Quality Control Board (RWQCB), Los Angeles Region	(213) 266-7475	1/20/94	She is in the Site Cleanup Unit (the RWQCB has 10 separate units). Suggested I call Rod Nelson in the Landfill Unit at (213) 266-7548.
Rod Nelson	RWQCB	(213) 266-7548	1/20/94	Has only a SWAT proposal, but no SWAT report in the file.

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CONTACT LOG (Cont'd)

Site: Victoria Golf Course

Name	Affiliation	Phone	Date	Information
Receptionist	South Coast Air Quality Management District (SCAQMD)	(818) 312-6400	1/21/94	Stacey Ebiner works out of the Diamond Bar office of the SCAQMD. Her number is (909) 396-2504.
Stacey Ebiner	SCAQMD	(909) 396-2504	1/21/94	Left a message for her to call me.
Ron Beal	County of Los Angeles, Facilities Management Department	(213) 738-2206	1/24/94	Referred to Steve Sharr, a division manager who had a few people working under him on the Victoria Golf Course project. Carl Wata was one of those working with Mr. Sharr. Phone number is (213) 738-2176
Diane Cotto	SCAQMD, Small Business Administration	(909) 396-3210	1/24/94	According to the SCAQMD database, the Victoria Golf Course site is not assigned to a specific employee of the SCAQMD.
Gary Turner	SCAQMD	(909) 396-2403	1/24/94	The SCAQMD has been reorganized and no longer has a landfill section. Rod Millican of the Air Toxics Program might know about other SCAQMD activities, especially permitting. His number is (909) 396-2591.
Receptionist	Victoria Golf Course, Maintenance Office	(310) 532-7690	1/27/94	Jerry Wolfanden will be in tomorrow. Left a message for him to contact me.
Rod Millican	SCAQMD, Public Facilities Group	(909) 396-2591	1/27/94	Left message inquiring about SCAQMD involvement with the site within the past 5 years.
Gary Lynch	Park Water Company	(310) 923-0711	1/28/94	See Contact Report.

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CONTACT LOG (Cont'd)

Site: Victoria Golf Course

Name	Affiliation	Phone	Date	Information
Steve Sharr	County of Los Angeles, Facilities Management Department	(213) 738-2176	2/3/94	Referred to William Ludvic, the project manager for the hazardous materials research that was conducted on site recently. The client for the work was the County of Los Angeles, Department of Parks and Recreation (DPR). However, the County apparently lost funding after the research was done, and any remaining investigative work will have been done by the DPR. Mr. Ludvik's number is (213) 738-2475.
William Ludvik	County of Los Angeles, Internal Services Department	(213) 738-2475	2/3/94	The County did a study for the DPR in Oct/Nov 1991 entitled Victoria Park and Golf Course Gas Migration System and Irrigation Improvement. The purpose of the study was to propose ways of locating the boundaries of the former landfill. He dealt with Peter Bogue at the DPR. He recommended I contact Jim Park at (213) 738-2965 to order a copy of the report. Since funding was lost after the completion of the report, Mr. Ludvic thought that his offices would no longer be involved with the site.
Jim Park	County of Los Angeles, Department of Parks and Recreation (DPR)	(213) 738-2965	2/3/94	He will search for the report and send me a copy by early next week. I will fax a request letter to him at 433 South Vermont, Los Angeles, CA 90020. Fax: (213) 487-0380.

CONTACT LOG (Cont'd)

Site: Victoria Golf Course

Name	Affiliation	Phone	Date	Information
Rod Millican	SCAQMD, Public Facilities Group	(909) 396-2591	2/7/94	He found no files on the site. He recalled sending a SCAQMD survey to Victoria Golf Course some time ago and receiving no reply.
Receptionist	Victoria Golf Course, Maintenance Office	(310) 532-7690	2/8/94	Mr. Wolfanden is in Florida for the week (he also oversees a golf course there). Try the main office at (310) 217-1408.
Receptionist	Victoria Golf Course, Main Office	(310) 217-1408	2/8/94	National Golf and Tennis leases the Victoria Golf Course. He recommended I contact Larry Lee or Steve Duron at the DPR, in Baldwin Park, who are his County contacts. Mr. Lee inspects the golf course every month and is very familiar with its history.
Receptionist	DPR	(818) 369-4073	2/8/94	Larry Lee's number is (818) 821-4609.
Steve Duron	DPR	(818) 821-4609	2/9/94	Planning Division people have been involved with attempting to design a methane gas extraction/entrapment system. Tom Dittmar, Supervising Landscape Architect, has been personally involved. Mr. Duron will have him contact me.
Tom Dittmar	DPR	(213) 738-2974	2/9/94	Jim Park, Peter Bogue and he are the most knowledgeable persons with regard to the site and should probably be present for the site visit. He will contact them about

CONTACT LOG (Cont'd)

Site: Victoria Golf Course

Name	Affiliation	Phone	Date	Information
				scheduling a site visit on either February 22 or 23. His address is: 433 S. Vermont Ave., Los Angeles, CA 90020. He will also attempt to fax me the document I requested (or send it if it's too large).
Tom Dittmar	DPR	(213) 738-2974	2/14/94	Set up site visit for 10 a.m. on February 23 at the Victoria Clubhouse. Fax: (213) 487-0380.
William Ludvik	County of Los Angeles, Internal Services Department	(213) 738-2475	2/14/94	See Contact Report.
Mike Mohajer	County of Los Angeles, Department of Public Works (DPW)	(818) 458-3502	2/15/94	The DPW has not conducted ambient air monitoring at the site. However, the DPW does have monitoring wells on site and throughout the city. These wells are currently monitored by the DPW for the existence of methane gas only. The DPW is concerned with documenting areas in the city of Carson where concentrations of methane are above certain thresholds, and therefore hazardous, because of methane's combustible nature. He has been involved with the Victoria site for a number of years and would like to receive a copy of the SIP report. He is: Assistant Division Engineer at the DPW, Waste Management Division, P.O. Box 1460, Alhambra, CA 91802-1460.

CONTACT LOG (Cont'd)

Site: Victoria Golf Course

Name	Affiliation	Phone	Date	Information
Tom Dittmar	DPR	(213) 738-2974	2/17/94	Rescheduled site visit to 10:30 a.m. on February 23, 1994.
Norma Garcia	Towne Avenue Elementary School	(310) 329-3505	2/24/94	See Contact Report.
Manager	Don Dominguez Apartments	(310) 327-1398	2/24/94	The Don Dominguez Apartments complex is located across the street from the Victoria Golf Course and has 62 units.
Bill Smith	Victoria Golf Course	(310) 323-6981	2/25/94	The Victoria Golf Course can accommodate a maximum of five people per hole. The course has 18 holes. In addition, there are a maximum of 10 employees on the site at any given time.
Secretary	Goodyear Administrative Offices	(213) 725-4000	2/25/94	She confirmed that the number for the Goodyear Tire and Rubber Blimp Base is (213) 770-0456. There is only a small staff at that location. She recommended I call that number to obtain any investigations/reports the Blimp might have done. There is no Goodyear environmental branch/office.
Joe Nick	Goodyear Tire and Rubber Blimp Base	(213) 770-0456	2/28/94	Although he was not familiar with the contents of the reports, Mr. Nick stated that an air SWAT and a site evaluation were completed by the Waste Management Division of the DPW on or around March 17, 1980. To the best of his

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CONTACT LOG (Cont'd)

Site: Victoria Golf Course

Name	Affiliation	Phone	Date	Information
				knowledge, these were the most recent environmental evaluations done on the Goodyear facility. He thought that the evaluations were initiated by the County, as he was unaware of any problems at the Goodyear facility due to the landfill. The maximum number of employees at the Goodyear facility at any one time is 30.
Frank Williams	DPW	(818) 458-4301	2/28/94	Referred to the Department of Regional Planning at (213) 974-6457 for information on persons per household.
Secretary	County of Los Angeles, Department of Regional Planning	(213) 974-6476	2/29/94	The average population per household for Carson, Calif., is 3.51. This information was taken from the 1990 census.

CONTACT REPORT

AGENCY/AFFILIATION: Los Angeles Unified School District		
DEPARTMENT: Towne Avenue Elementary School		
ADDRESS: 18924 Towne Avenue	CITY: Carson	
COUNTY: Los Angeles	STATE: CA	ZIP: 90746
CONTACT(S) Norma Garcia	TITLE Office Assistant	PHONE (310) 329-3505
BEI PERSON MAKING CONTACT: Jordie Bornstein JB		DATE: 2/24/94
SUBJECT: Size of student body at Towne Avenue Elementary School		
SITE NAME: Victoria Golf Course	EPA ID: CAD 980818926	

DISCUSSION:

Ms. Garcia stated that there are currently 492 students enrolled at the Towne Avenue Elementary School.

CONTACT CONCURRENCE: _____ **DATE:** _____

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CONTACT REPORT

AGENCY/AFFILIATION: Los Angeles Unified School District		
DEPARTMENT. Towne Avenue Elementary School		
ADDRESS: 18924 Towne Avenue	CITY: Carson	
COUNTY: Los Angeles	STATE: CA	ZIP: 90746
CONTACT(S) Norma Garcia	TITLE Office Assistant	PHONE (310) 329-3505
BEI PERSON MAKING CONTACT: Jordie Bornstein JB		DATE: 2/24/94
SUBJECT: Size of student body at Towne Avenue Elementary School		
SITE NAME: Victoria Golf Course	EPA ID: CAD 980818926	

DISCUSSION:

Ms. Garcia stated that there are currently 492 students enrolled at the Towne Avenue Elementary School.

CONTACT CONCURRENCE: _____ **DATE:** _____

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A133 0009

CONTACT REPORT

AGENCY/AFFILIATION: County of Los Angeles		
DEPARTMENT: Internal Services Department (ISD)		
ADDRESS: 550 S. Vermont Ave.	CITY: Los Angeles	
COUNTY: Los Angeles	STATE: CA	ZIP: 90020
CONTACT(S) William Ludvik	TITLE Project Manager	PHONE (213) 738-2475
BEI PERSON MAKING CONTACT: Jordie Bornstein JB		DATE: 2/14/94
SUBJECT: Background information on irrigation improvements and gas migration system		
SITE NAME: Victoria Golf Course	EPA ID: CAD 980818926	

DISCUSSION:

Mr. Ludvik was the Project Manager for the "Victoria Park and Golf Course Gas Migration System and Irrigation Study" report prepared for the Department of Parks and Recreation (DPR) by the ISD in 1991. The preparation of the report was not mandated by the South Coast Air Quality Management District (SCAQMD); instead, the impetus for the study was primarily to investigate alternatives for improving the irrigation system at the golf course since the lawn and trees at the site were dying.

Concurrent with the irrigation portion of the study, the DPR was interested in investigating the possibility of installing a gas migration system since they thought that the two problems might be related. Although the initial study was funded by the DPR, Mr. Ludvik stated that it was likely that the DPR had decided to address more critical problems at other sites since the ISD office has not been requested to do any further work for the Victoria Golf Course site.

Although the ISD's 1991 report recommended that, prior to initiation of further studies at the site (topographic and/or geophysical), an application for exemption from the SCAQMD's Rule 1150.2 should be filed; however, Mr. Ludvik stated that ~~neither the DPR nor the ISD followed up on this recommendation.~~ HE IS NOT AWARE THAT DPR FILED THE APPLICATION FOR EXEMPTION AND ISD WERE NOT REQUESTED TO FILE AN EXEMPTION FOR DPR.

CONTACT CONCURRENCE: William Ludvik DATE: 3/2/94

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CONTACT REPORT

AGENCY/AFFILIATION: Park Water Company		
DEPARTMENT:		
ADDRESS: P.O. Box 7002	CITY: Downey	
COUNTY: Los Angeles	STATE: CA	ZIP: 90241-7002
CONTACT(S) Gary Lynch	TITLE Director of Water Quality	PHONE (310) 923-0711
BEI PERSON MAKING CONTACT: Jordie Bornstein JB		DATE: 1/28/94
SUBJECT: Water supply information for wells in the vicinity of Carson		
SITE NAME: Victoria Golf Course and Martin Adams Dump	EPA ID: CAD 980818926 and CAD 981399520	

DISCUSSION:

There is one Park Water Company drinking water well located in the City of Lynwood that serves an approximate population of 1,000 people. There are four Park Water Company drinking water wells located in the City of Compton. These are active wells that are maintained to supplement the Lynwood well in case of emergency; however, they do not serve any particular population regularly. Mr. Lynch stated that 99 percent of the drinking water in the Lynwood/Compton area is supplied by surface water.

CONTACT CONCURRENCE: Gary R Lynch **DATE:** 2/9/94

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APPENDIX D

SITE RECONNAISSANCE INTERVIEW AND OBSERVATIONS REPORT

Bechtel Environmental, Inc.
P.O. Box 193965
San Francisco, CA 94119-3965

OBSERVATIONS MADE BY: Jordie Bornstein DATE: February 23, 1994

FACILITY REPRESENTATIVE(S) and TITLE(S):

Thomas Dittmar, County of Los Angeles, Department of Parks and Recreation
Peter Bogue, County of Los Angeles, Department of Parks and Recreation

SITE: Victoria Golf Course

EPA ID: CAD 980818926

A site reconnaissance was conducted at the Victoria Golf Course site on February 23, 1994. The weather was sunny and the temperature was approximately 70°F. The Bechtel Environmental, Inc. (BEI) representative Jordie Bornstein conducted the site reconnaissance with Thomas Dittmar and Peter Bogue at 10:30 a.m. to gather information on the site location and size, site history, processes used, and any hazardous waste generated, treated, stored, or disposed of on site. The BEI representative was provided with a packet of information prepared in response to BEI's letter dated February 14, 1994. The reconnaissance included a site tour during which photographs were taken.

The following information was obtained during the site reconnaissance:

The 200-acre Victoria Golf Course occupies approximately two thirds of the site, which is in a mixed residential and light commercial area of Carson, Calif., and overlies the former (inoperative) Ben K. Kazarian (BKK) Dump. The golf course is owned by the County of Los Angeles. National Golf and Tennis leases and operates the golf course. Although the exact boundaries of the former landfill are currently unknown, evidence indicates that possibly, in addition to the golf course, the former landfill underlies the adjacent Goodyear Tire and Rubber Blimp Base, an apartment complex, the Dominguez Golf Course, the Victoria Regional Park, and the parking lot of a shopping center. Mr. Bogue indicated that Figure 2 (Site Location Map) of the SI report probably shows accurately the boundaries of the former BKK landfill; however, he added that insufficient field research has been done to definitively locate the boundaries. The Towne Avenue Elementary School is located immediately across 192nd Street from the golf course. The entire golf course is surrounded by a chain-link fence.

Currently, the only potential hazardous substances stored on site are raw fertilizers and pesticides stored in the maintenance yard of the golf course and used for weed control. In addition, the maintenance yard has an underground fuel storage tank used to store fuel for the golf carts. Jerry Wolfanden is the superintendent who can provide specific information on fuel amounts and usage.

The golf course has significant problems with land subsidence. Ground levels differ by some 2 feet to 5 feet in certain areas, creating swales for hundreds of yards. The land subsidence appears

to be due to the historic cut-and-fill operation known as "trenching," a process whereby parallel trenches were filled with debris and then capped. Currently, some former trenches can easily be seen as linear swales evenly occurring across the golf course. In addition, in concurrence with the trenching theory, the site's vegetation is stressed in certain areas and healthy in others. An average of 3 feet of clean fill material was placed on top of the BKK Carson Dump during its closure.

Although a variety of drainage ditches have been constructed throughout the golf course, subsidence has rendered nearly all of them non-functional. Stormwater tends to accumulate in low-lying areas until it percolates down through the sandy/silty soils. Puddles of water ranging in size from 1 foot to 30 yards in diameter and creating marshy areas could be seen in the southeastern portion of the golf course. As far as is known, the lessees of the golf course have never drained surface water directly into the Dominguez Channel.

The County of Los Angeles, Department of Public Works (DPW), has conducted quarterly methane analyses of gas monitoring wells on site since approximately 1988.

The DPR estimates that it will cost $1 million to make the irrigation system functional. The DPR has already spent approximately $100,000 attempting to propose ways of renovating the irrigation system and planning for a potential gas migration system. Various stages of plans have been sent to the South Coast Air Quality Management District but have elicited no response. Mr. Bogue plans to complete an environmental assessment on the golf course by re-initiating the bidding process and obtaining funding from a source other than the board of directors. The DPR is considering pursuing the exemption on Rule 1150.2, which requires all landfills closed prior to a certain date to have gas migration systems installed. The DPR has looked into the possibility of holding BKK Carson Dump responsible; however, the present-day BKK Corporation is a separate entity, so the DPR has decided not to pursue it.

LOS ANGELES COUNTY

September 26, 1991

51-2

Robert P. Ghirelli, Executive Officer
Regional Water Quality Control Board
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

Dear Mr. Ghirelli:

VICTORIA COUNTY GOLF COURSE
GAS MIGRATION SYSTEM
SOLID WASTE ASSESSMENT TEST
SPECS. NO. 4952; C.P. NO. 76164

In June of 1988 a Water Quality Solid Waste Assessment Test Report, SWAT, for Victoria County Golf Course, was submitted to the Regional Water Quality Control Board for review and comments by the BKK Corporation who were the original owners of the refuse disposal site.

As of this date, your office has not responded to the report and in discussion with Mr. Rod Nelson of your staff, the project has been given a very low priority. Additionally, Mr. Nelson has indicated that July of 1992 may be the earliest possible date that the SWAT Report would be considered for review.

The Los Angeles County Department of Parks and Recreation, which maintains and operates Victoria Golf Course, Washes to proceed with major improvements to the facility which include a new irrigation system, landscaping and improved drainage. However, findings based on the water SWAT Report could require a major cleanup of the site resulting in serious and costly impacts to any improvements made previously.

William F. Steward
Chief

Joan Onderkirk
Chief Deputy

Facilities Operations

Information Technology

Purchasing and Central Services

Construction and Real Property Service
R. E. Abbott
Senior Deputy Director

550 South Vermont Avenue
Los Angeles, California 90020
(213) 738-2000
FAX (213) 738-2132

May we request a expeditious review of the report and response to this office. This would allow for a action plan to be prepared and implemented for the needed improvements at the Golf Course.

I am available to discuss any questions you may have and can be reached at (213) 738-2475.

Very truly yours,

WILLIAM F. STEWART
Director

William Ludvik
Project Manager
Project Management Division

WFS:STS
BL: tc 33

c: Linda Lee - AQMD

(a:\Victgolf.Ltr)

File 51-2 1/25/91.

Subject: Dominguez Properties letter of 1/21/91.

- Dominguez Properties said BKK-Carson landfill includes Dominguez Golf Course, too.
- SWAT Proposal for BKK-Carsm site doesn't include Dominguez Golf Course
- I made a phone call today to Paul Neff of BKK-Corp. regarding this matter.
- Paul Neff of BKK Corp. knows this matter.
- Therefore, Staff should review the Proposal again whether it is adequate or not including Dominguez Golf Course, because the proposal covers Victoria Golf Course & Goodyear site.

MC

Dominguez Properties

January 21, 1991

Mr. Paul Cho
Los Angeles Regional Water
Quality Control Board
101 Center Plaza Drive
Monterey Park, CA 91754

Dear Paul,

As promised, enclosed is a map depicting the ownerships of the Main Street landfills. The three properties outlined in green are owned by Watson Land Company or one of its subsidiaries. The area outlined in yellow by Dominguez Properties and the area in orange by the Goodyear Blimp operation. The remainder of the landfill, uncolored, is owned by the County of Los Angeles. In addition to the landfill map, I have attached colored assessors maps showing the acreages of the property, color-coded in the same manner as the landfill map. If you have any further questions, please give me a call.

Very truly yours,

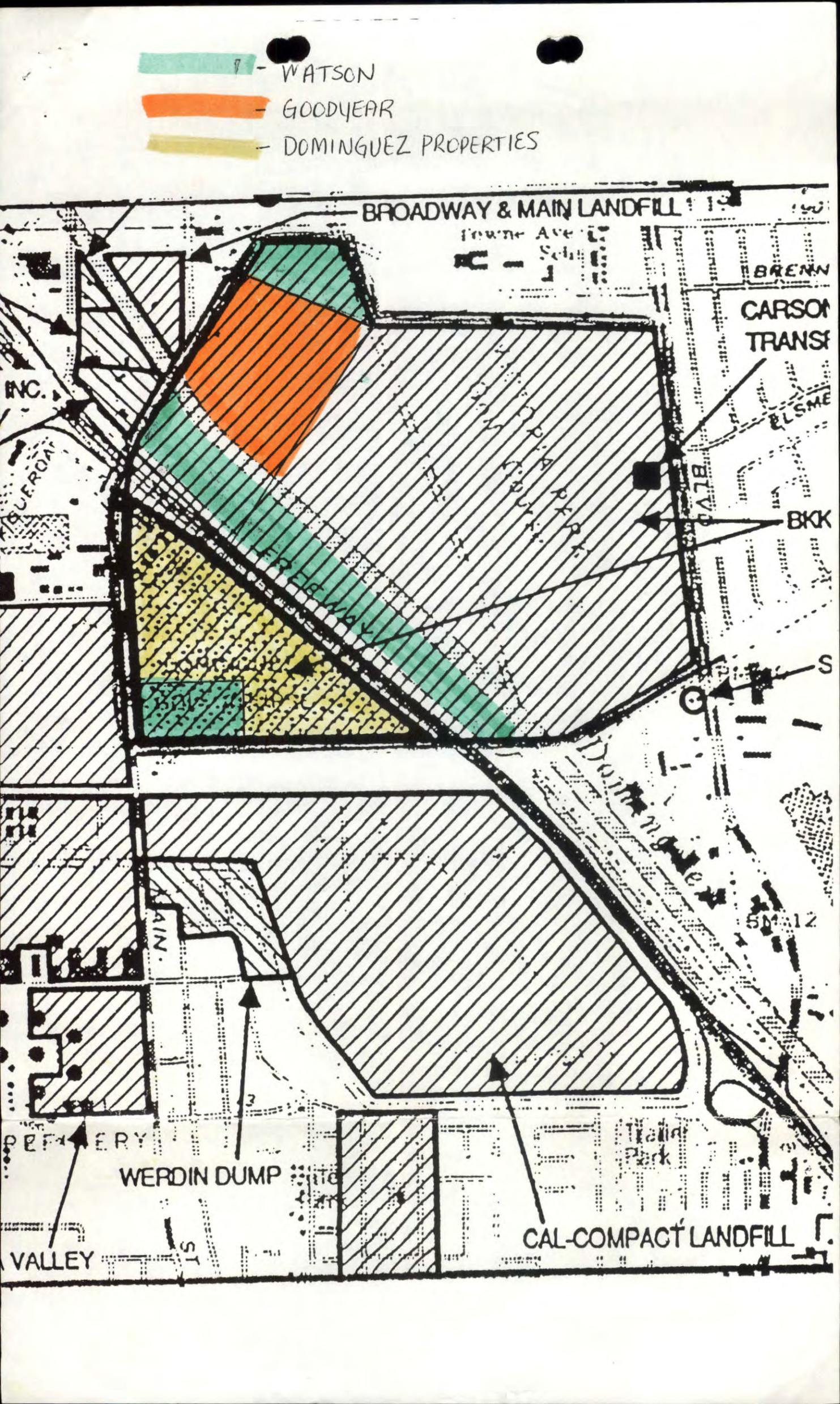
WATSON LAND COMPANY
A General Partner

M S Genewick

Michael S. Genewick
Vice President
Energy and Environment

cc: Joel Moskowitz, Gibson, Dunn & Crutcher
Joseph R. Brown, Jr., Pres., Carson Estate Co.

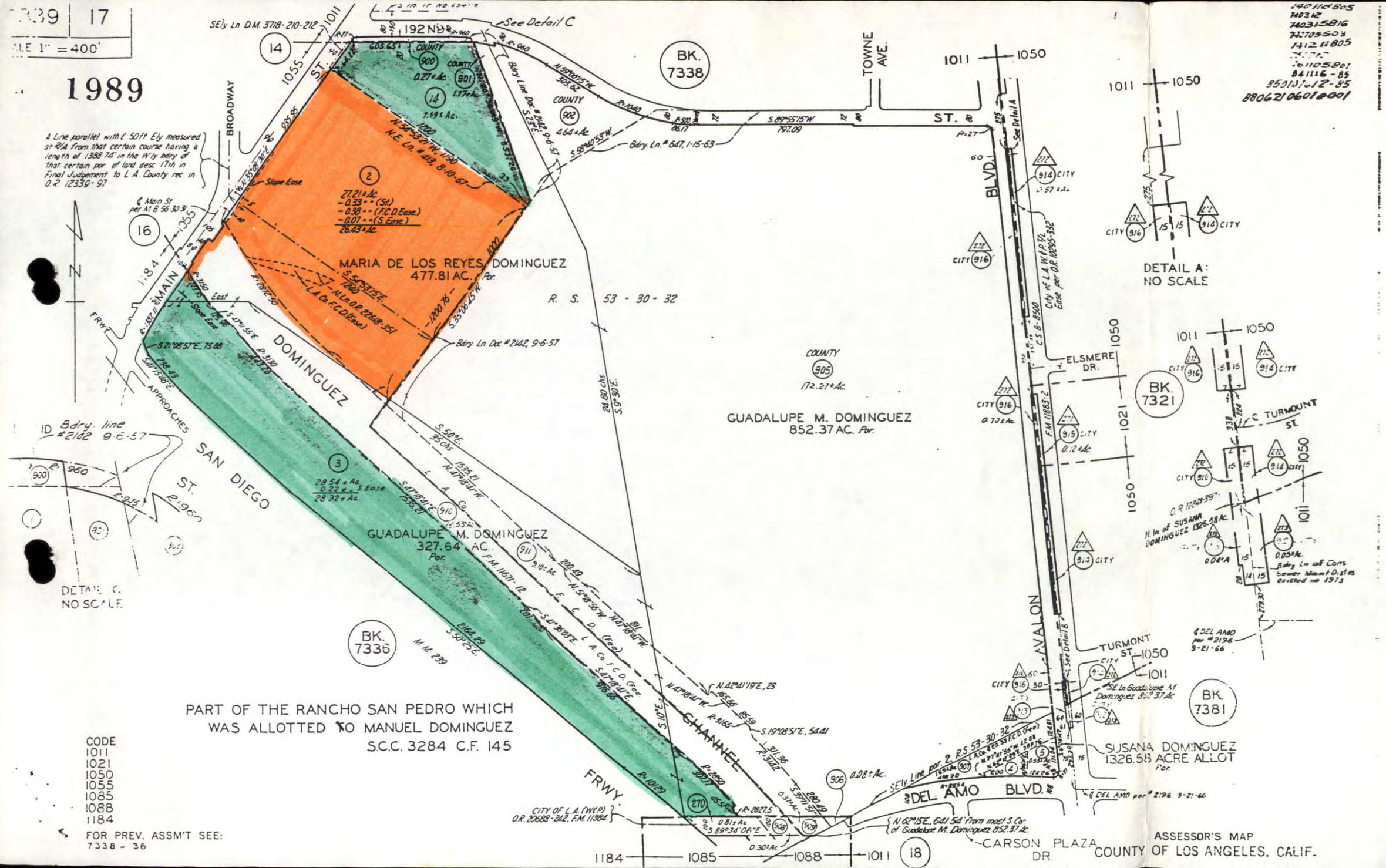
js/m-0057


- WATSON
- GOODYEAR
- DOMINGUEZ PROPERTIES
BROADWAY & MAIN LANDFILL
CARSON
TRANSF
BKK
WERDIN DUMP
CAL-COMPACT LANDFILL
VALLEY

7339 | 17

SCALE 1" = 400'

1989



PART OF THE RANCHO SAN PEDRO WHICH WAS ALLOTTED TO MANUEL DOMINGUEZ S.C.C. 3284 C.F. 145

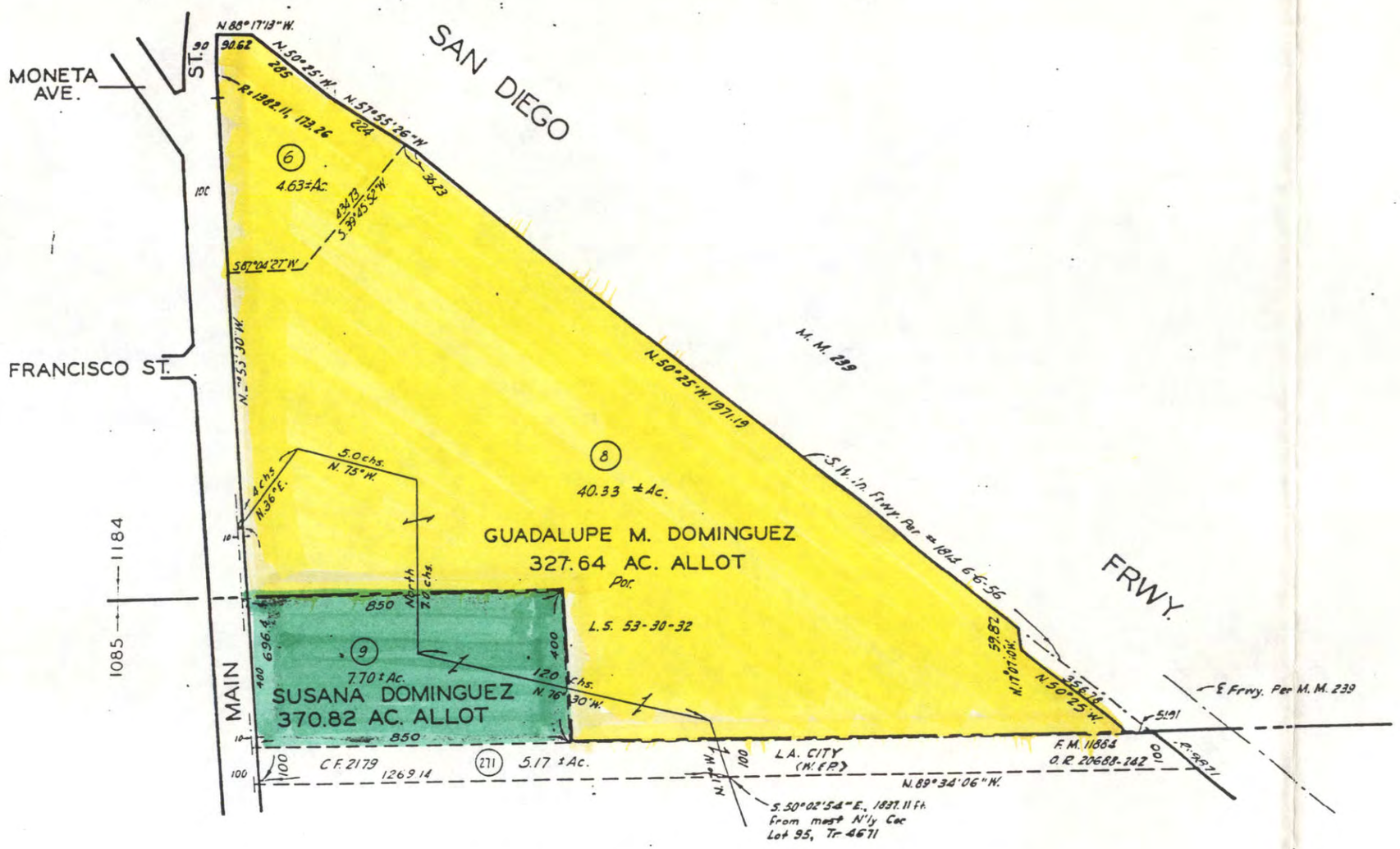
CODE
1011
1021
1050
1055
1085
1088
1184

FOR PREV. ASSM'T SEE: 7338 - 36

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

336	9
E 1" = 300'	

REVISED
620220
640305
650115
651118
670603100
680315513
680528
700225
720301
7408096O7
791138503
810112603
841023-85



PART OF THE RANCHO SAN PEDRO
WHICH WAS ALLOTTED TO MANUEL DOMINGUEZ

S.C.C. 3284
C. F. 145

CODE
1184
1085

FOR PREV. ASSM'T. SEE: 1384-26
7336-10

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

51.002

Dominguez Properties

February 28, 1990

Dr. Robert P. Ghirelli
California Regional Water Quality
Control Board
101 Centre Plaza Drive
Monterey Park, California 91754

Re: **BKK Carson Landfill**

Gentlemen:

Pursuant to your letter of January 27, 1988 we notified the Board that the operator of the subject landfill was the BKK Corporation and that any SWAT requirements should be addressed to them directly. In the intervening time we have heard nothing. We are requesting that you bring us up to date on the status of the SWAT investigation.

Sincerely

WATSON LAND COMPANY
A General Partner

MSGenewick

Michael S. Genewick
Vice President,
Energy & Environment

:bbk
R-0044

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL AND ENVIRONMENTAL ENGINEERS

July 26, 1989

EXPRESS MAIL #B12357555W

Mr. Michael E. Taweel
Senior Engineering Geologist
California Regional Water Quality Control Board
Los Angeles Region
107 S. Broadway, Room 4027
Los Angeles, CA 90012-4596

RE: SOLID WASTE ASSESSMENT TEST (SWAT) - BKK CARSON SITE (FILE NO. 51-02)

Dear Mr. Taweel:

This is in response to your letter of July 14, 1989 regarding the status of the SWAT program at the 19200 Main Street - Carson site. Bryan A. Stirrat & Associates (BAS) has been retained by BKK Corporation to provide engineering services for the Carson Landfill SWAT. As a result, BAS submitted a SWAT proposal to the Regional Water Quality Control Board (RWQCB) - Los Angeles Region in March, 1988. This submittal was intended to comply with the April 1, 1988 deadline, as stated in the RWQCB letter of January 15, 1988.

The "Board" responded to this submittal by requesting that the SWAT proposal be revised to include surface, groundwater and vadose zone monitoring (RWQCB letter of May 20, 1989). The deadline for the revised SWAT proposal was stated as June 6, 1988. BAS complied by submitting a revised SWAT proposal by this date, which included details for installation of groundwater and vadose zone monitoring wells and a quarterly sampling program.

Following this submission. BAS continued to maintain communication with RWQCB staff concerning the review of the SWAT proposal. In a telephone conversation (October 13, 1988) with Mr. Rod Nelson, it was indicated that the "Board" had not yet reviewed the revised SWAT proposal (June submittal). On January 31, 1989, Mr. Nelson was contacted again to inquire about the review of the SWAT proposal. He indicated that the document had undergone preliminary review and comments were anticipated by February 6, 1989. Further, we were informed that in the future, Mr. Clay Booher should be contacted concerning the SWAT status.

Mr. Booher was contacted on April 10, 1989 about the "Boards" review of our revised SWAT proposal. He indicated that final review of the document had not been completed. On April 12, 1989 the "Board" responded to the revised SWAT proposal and requested that additional information be submitted by May 12, 1989. BAS submitted responses to RWQCB comments on May 11, 1989 (attached).

1199 Fairway Drive • Walnut, CA 91789 • (714) 594-5008 • FAX (714) 595-6222

At this time we have not received a response to our submittal, nor to our request that a new SWAT report due date be established for this site. We consider that a more appropriate date for filing the report would be one year from the date of approval of the SWAT proposal especially since no new information about the site is available without the implementation of the SWAT proposal.

In a recent conversation (July 24, 1988) with Mr. Paul Cho of your staff, it was indicated that due to the lack of the Board's approval of the proposed investigation plan, no field activities had been conducted. He indicated that although the Board has not approved the SWAT proposal, regulations require that a letter explaining the circumstances, be submitted by July 28. Upon receipt of such a letter the status of the SWAT would be updated. Further, he indicated that the letter include a proposed new schedule for the implementation of the SWAT proposal.

BAS is prepared to implement a SWAT investigation including drilling and installation of groundwater and vadose zone monitoring wells 6 to 8 weeks from the date of approval of the SWAT proposal. A first round of samples can be collected and analyses can be conducted with an interim report submitted 4 weeks after receipt of analysis results from the laboratory. Monitoring will then be conducted quarterly and reports submitted 4 weeks after each quarterly sampling event. A final SWAT report, which includes a compilation of the previous sampling events and reports can then be submitted 6 weeks from the date of the fourth quarter sampling.

A final detailed schedule including specific dates for sampling and reporting activities can be prepared and submitted to the RWQCB as soon as the SWAT proposal is approved.

Should you have any questions or require additional information, please advise.

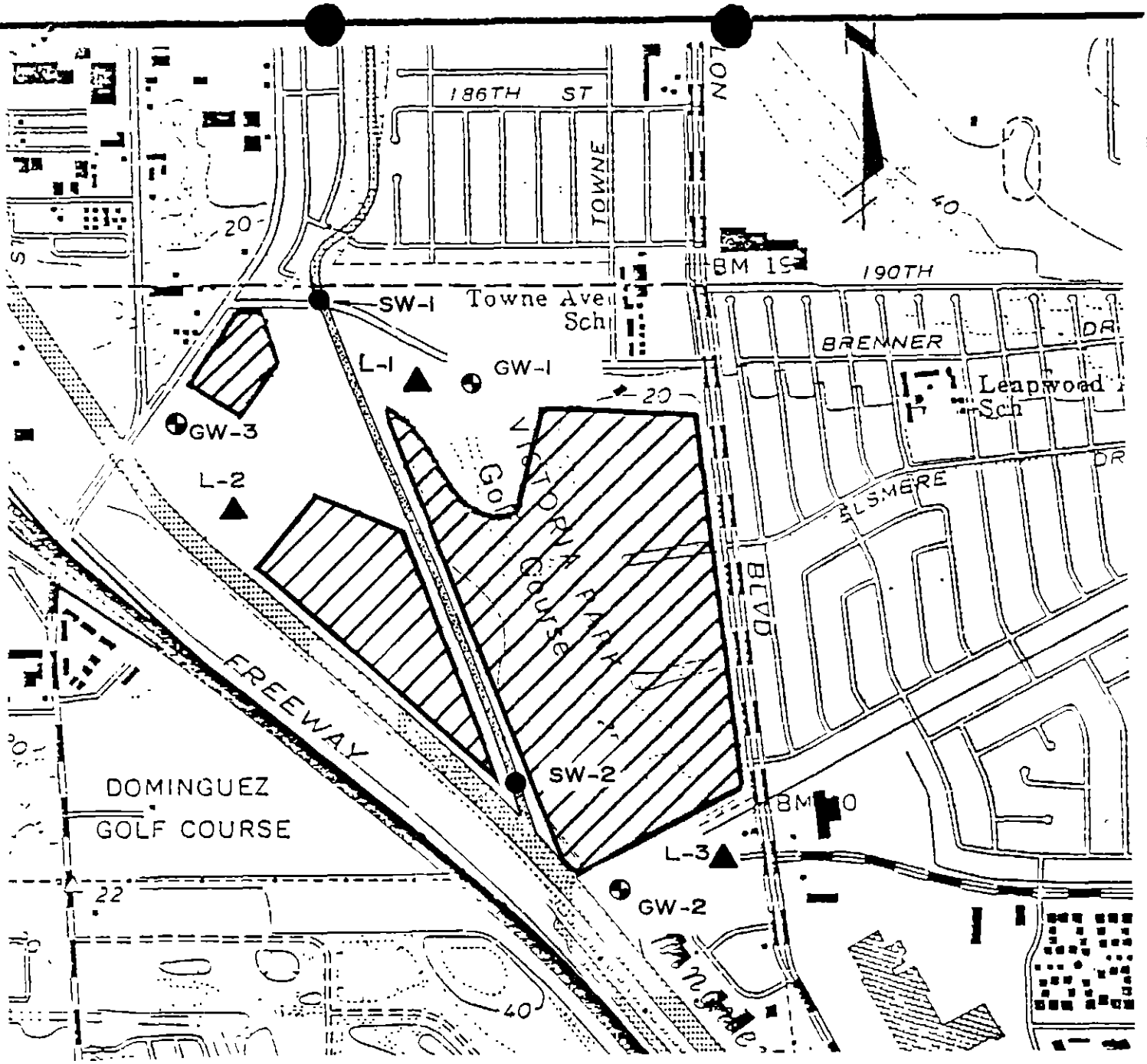
Very truly yours,

Rodolfo E. Coto
Project Engineer
Environmental Services Division

Arjun Rajaratnam, Director
Environmental Services Division

REC/cvg

cc: Paul Cho - RWQCB-LA Region (w/encl. EXPRESS MAIL #B12357556W)
Jim Parsons - SWRCB (CERTIFIED MAIL W/RETURN RECEIPT)
Ken Kazarian - BKK
Ronald R. Gastelum, Esq - BKK
Valerie Marshall - BKK
Bryan A. Stirrat - BAS



LEGEND

- ▲ L-1 VADOSE ZONE MONITORING WELL
- ⊕ GW-1 GROUND WATER MONITORING WELL.
- ● SW-2 SURFACE WATER MONITORING LOCATION

NOTE:

LIMITS OF REFUSE BASED ON AVAILABLE INFORMATION

FIGURE 2

BAS
BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS
(714) 594-5008
1199 FAIRWAY DR • P.O. BOX 7085 • INDUSTRY CA 91744

PROPOSED MONITORING LOCATIONS SWAT INVESTIGATION

JOB NO.	
DATE	6/88
DRAWN BY	RDS
CHECKED BY	DR

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL AND ENVIRONMENTAL ENGINEERS

July 26, 1989

EXPRESS MAIL #B12357555W

Mr. Michael E. Taweel
Senior Engineering Geologist
California Regional Water Quality Control Board
Los Angeles Region
107 S. Broadway, Room 4027
Los Angeles, CA 90012-4596

RE: SOLID WASTE ASSESSMENT TEST (SWAT) - BKK CARSON SITE (FILE NO. 51-02)

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Following this submission, BAS continued to maintain communication with RWQCB staff concerning the review of the SWAT proposal. In a telephone conversation (October 13, 1988) with Mr. Rod Nelson, it was indicated that the "Board" had not yet reviewed the revised SWAT proposal (June submittal). On January 31, 1989, Mr. Nelson was contacted again to inquire about the review of the SWAT proposal. He indicated that the document had undergone preliminary review and comments were anticipated by February 6, 1989. Further, we were informed that in the future, Mr. Clay Booher should be contacted concerning the SWAT status

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A final detailed schedule including specific dates for sampling and reporting activities can be prepared and submitted to the RWQCB as soon as the SWAT proposal is approved.

Should you have any questions or require additional information, please advise.

Very truly yours,

Rodolfo E. Coto
Project Engineer
Environmental Services Division

Arjun Rajaratnam, Director
Environmental Services Division

REC/cvg

cc: Paul Cho - RWQCB-LA Region (w/encl. EXPRESS MAIL #B12357556W)
Jim Parsons - SWRCB (CERTIFIED MAIL W/RETURN RECEIPT)
Ken Kazarian - BKK
Ronald R. Gastelum, Esq - BKK
Valerie Marshall - BKK
Bryan A. Stirrat - BAS

51-02

BKK-CARSON

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL AND ENVIRONMENTAL ENGINEERS

May 25, 1989

Michael E. Taweel
Sr. Engineering Geologist
California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 4027
Los Angeles, California 90012-4596

RE: Response to Comment on Solid Waste Water Quality Assessment Test (SWAT) Proposal for the 19200 South Main Street, Carson Site (File Number 51-02)

Dear Mr. Taweel:

Enclosed is a new Figure 2 which should be added to our responses, dated May 11, 1989. Inadvertently the old Figure 2 was left in our earlier submittal. We apologize for the inconvenience caused.

Should you have any questions or require additional information, please advise.

Very truly yours,

Arjun Rajaratnam, Director
Environmental Services Division

AR/cvg

Enclosure:

cc: Mr. Ken Kazarian - BKK Corporate
Mr. Ron Gastelum, Esq. - BKK Corporate
Bryan A. Stirrat - BAS
Rudy Coto - BAS

1199 Fairway Drive • Walnut, CA 91789 • (714) 594-5008 • FAX (714) 595-6222

Pg. 3-4: ADDING A NEW SECTION (SECTION 3.3.5):

"3.3.5 After installation of all three groundwater monitoring wells initial water level measurements will be utilized to construct a water level contour map. This map will be submitted to the RWQCB."

RWQCB COMMENT NO. 2:

An additional lysimeter should be proposed to better cover the vadose zone.

BAS RESPONSE:

Pg. 3-10: SECTION 3.5, VADOSE ZONE WELLS, HAS BEEN AMENDED, AND A NEW SECTION 3.6 DISCUSSING SAMPLING AND ANALYSIS OF LYSIMETERS HAS ALSO BEEN ADDED AS FOLLOWS. FIGURE 2 WILL BE AMENDED TO INDICATE ONE MORE LYSIMETER ADJACENT TO GROUNDWATER MONITORING WELL GW-1.

3.5 VADOSE ZONE WELL INSTALLATION PLAN

The proposed vadose zone sampling wells, L-1, L-2 and L-3, are shown on Figure 2. These sampling locations were selected based on proximity to the site and the proposed background groundwater monitoring well.

All lysimeters will be placed a minimum of 10 feet above any groundwater encountered or below the estimated lowest elevation of refuse. These lysimeters are intended to detect any fluids migrating through the vadose zone.

Downgradient lysimeters will be placed as close to the fill as possible. Since the lowest elevation of waste is unknown at this site, angle drilling to place the lysimeter under the fill may not be possible.

The lysimeter that will be placed is a pressure/vacuum lysimeter manufactured by Soil moisture Equipment Corporation of Santa Barbara, California. The instrument to be used is the Model 1940 HI/Pressure-Vacuum Soil Water Sampler (See Figure 4).

3.5.1 Lysimeter Depths

The depth of placement of each of the lysimeters will be determined based primarily upon visual observation of cores obtained during drilling. This visual data, determined in the field, will be supplemented by laboratory data obtained from moisture, density and cation exchange capacity tests. The lysimeters will be placed within the vadose zone, within lithologies that are fine grained and moist, if possible; fractured and jointed horizons that are conducive to liquid migration are also favorable locations.

3.5.2 Drilling Methods

Lysimeter wells will be drilled using a hollow-stem auger.

3.5.3 Well Design

Each vadose zone monitoring well will be constructed as follows (see Figure 4):

- o 6-inch diameter borehole.
- o Soil moisture Model 1940 HI/Pressure-Vacuum Soil Water Sampler.
- o Stainless steel centralizers will be placed at 20-foot intervals.
- o 1/4-inch diameter polyethylene tubing (inlet-outlet) will extend from lysimeter to surface.
- o 1 1/2-inch diameter schedule 40 PVC pipe extending from lysimeter to surface will protect 1/4-inch polyethylene tubing. Pipe will be flush threaded - no glues or solvents will be used in construction.
- o Silica slurry will be tremmied into place around lysimeter.
- o A minimum of two feet of bentonite clay will be placed on top of silica slurry to prevent the infiltration of surface water into the well.
- o The remaining annulus above the bentonite seal will be back-filled with excavated soil or clean import to a point three feet below ground surface. Backfill shall not contain aggregate larger than 1/4-inch.
- o A three-foot thick concrete cap will be placed on top of the backfill.
- o The protective 1 1/2-inch PVC pipe will be provided with a cap with fittings that secure the 1/4-inch polyethylene tubes and allow them to pass through.
- o Polyethylene tubes will be rendered vacuum - tight by clamps; open tube ends will be plugged to prevent fouling or clogging by dirt, insects, etc.
- o A vented 2-foot steel locking cover will be installed at the surface for structural integrity and security.

Prior to their placement in the borings, each lysimeter and all tubing will be pressure and vacuum tested.

In addition, a volume of water corresponding to thirty percent of the volume of water used in the silica slurry will be extracted through the device as part of development. This will involve pouring distilled water down the tubing and letting it stand for several days and then attempting to extract the water. If a steady flow is not produced, the installation will have to be redone.

3.5.4 Equipment and Methodology

- Pressure vacuum lysimeters have been used to obtain samples of in-situ soil moisture. In its most improved form this device consists of a porous ceramic cup capable of holding a vacuum, a small-diameter sample accumulation chamber of PVC pipe, and two sampling tubes leading to the surface.

- A typical pressure-vacuum lysimeter is depicted in Figure 5.

3.6 VADOSE ZONE WELL SAMPLING AND ANALYSIS PLAN

3.6.1 Sampling

The pump used in conjunction with these pressure-vacuum lysimeters is a two-way hand pump that can either deliver a back pressure or pull a vacuum. It is similar to a tire pump and can be purchased from any laboratory equipment supply house. A small vacuum gauge may be installed on the pump by means of a tee union. This enables the operator to consistently apply a desired vacuum to all lysimeters. A length of Tygon tubing is secured to each of the pump's pressure and vacuum ports, allowing the pump to be coupled to the access tubes of the lysimeters. The free ends of the pump's tubing are slipped over a short length of copper tubing that is secured to the pressure-vacuum tube of the lysimeter and is held securely by a small spring-loaded clamp.

A typical pressure-vacuum lysimeter sampling sequence is as follows:

- The lysimeter's discharge tube is clamped shut and the vacuum side of the two-way pump is attached to the "in" tube.

- A desired vacuum is drawn, and the "in" tubing is clamped shut.

- To recover soil-water samples, the pressure side of the two-way pump is attached to the lysimeter's "in" tube; and the pinch clamps are removed. A few strokes of the hand pump generates enough pressure to force the water out of the lysimeter and into a collection bottle placed under the discharge tube.

- After emptying the lysimeter, the vacuum side of the pump is attached to the "in" tube, and the lysimeter is evacuated again to gather another sample.

3.6.2 Quality Assurance/Quality Control

The same procedures described for collection of groundwater samples will be strictly followed.

3.6.3 Analytical Procedures

The same analyses as for groundwater samples will be conducted depending upon the volume obtained. First preference for analysis will be for volatile organic priority pollutants, followed by field parameters like pH and specific conductivity; then solid waste contamination indicators such as COD, chloride, sulfate and nitrate; followed by semi-volatile organic priority pollutants and heavy metals.

RWQCB COMMENT NO. 3:

The required organic priority pollutants analyses methods are EPA Methods 601 and 602 or 624, and EPA Method 625. Also oil & grease should be added to the parameter list. If EPA 601/602 or 624 does not include acetone and 2-butanone, perform EPA 1624 (SIC) also.

BAS RESPONSE:

Pg. 3-9: SECTION 3.4.12, No. 1 AND No. 4 WILL BE AMENDED AS FOLLOWS:

"1. Organic Priority Pollutants scan by EPA Method 624 expanded for acetone and 2-butanone and EPA Method 625.

4. Measurements of COD, TDS, Chloride, Sulfate, Nitrate and Oil & Grease."

RWQCB COMMENT NO. 4:

To complete the QA/QC program, propose to sample one of the downgradient wells in duplicate.

BAS RESPONSE:

Pg. 3-9: SECTION 3.4.13, FIRST PARAGRAPH, THIS SENTENCE WILL BE ADDED AT THE BEGINNING OF THE PARAGRAPH:

"At least one downgradient well will be sampled in duplicate during each round of sampling." The laboratory shall.....

RWQCB COMMENT NO. 5:

The proposed vadose monitoring plan is incomplete. Include complete plans and specifications as you did for the groundwater plan.

BAS RESPONSE:

AN AMENDED SECTION 3.5 VADOSE ZONE WELL INSTALLATION PLAN AND SECTION 3.6 VADOSE ZONE WELL SAMPLING AND ANALYSIS HAS BEEN ADDED. (SEE EARLIER RESPONSE.)

RWQCB COMMENT NO. 6:

Surface water monitoring is also required. Submit complete plans and specifications as outlined in the SWAT Guidelines.

BAS RESPONSE:

A NEW SECTION 3.7 "SURFACE WATER SAMPLING AND ANALYSIS PLAN" WILL BE ADDED AS FOLLOWS:

3.7 SURFACE WATER SAMPLING AND ANALYSIS PLAN

The flow in the creek adjacent to the site is seasonal, with flow occurring only during and immediately after storms. Therefore, it may not be possible to obtain water samples during the SWAT field testing program. However, an attempt will be made to obtain surface water samples from the creek immediately following a storm, with the results submitted in an addendum to the SWAT Report.

The two proposed surface water monitoring locations are shown on Figure 2. Sampling point SW-1 is located upgradient of the site in the northwest corner. Final sampling locations will be based upon accessibility of a sampling point that could be considered to be upgradient from the site. SW-2 will be located downgradient of any known disposal activities. No other surface water is known to be present within a one-mile radius of the site except for the completely lined Dominguez Channel.

The depth and volume of flow will determine the sampling procedures used. It may be necessary to dam up the flow to obtain sufficient water depth to obtain a sample.

Any visible seeps or runoff from the site into the creek will also be sampled.

3.7.1 Sampling Procedures and Analysis

Surface water samples will be collected at any two accessible points to the creek; one upgradient and another downgradient of the site. Samples will be collected from flowing water, if possible. If this is not

possible, a low dam will be built from clean sand bags to form a pool and samples will be collected from the pool. The downstream pool will be formed first if this procedure is used.

Samples for volatile organics will be collected first in 40 ml. containers with Teflon lined septum cap. Samples for all other parameters will be collected with a wide mouth Teflon container and carefully poured into the appropriate sample container. All other sampling, QA/QC and analytical procedures will follow those specified for groundwater in Section 3.4.

3.7.2 Quality Assurance/Quality Control

The same procedure described for collection of groundwater samples will be strictly followed.

3.7.3 Quality Assurance/Quality Control

The same analyses as for groundwater samples will be conducted.

RWQCB COMMENT NO. 7:

Indicate which statistical method(s) will be used to determine if the site is impacting the nearby ground and surface waters.

BAS RESPONSE:

For comparison of upgradient to downgradient concentrations based upon analysis results of groundwater and surface water samples, averages and standard deviations for the various data will be utilized. A statistically significant difference would be indicated by the average concentrations obtained downgradient exceeding the average plus or minus three standard deviations of the concentrations obtained upgradient.

ADDITIONAL RWQCB COMMENTS

RWQCB COMMENT NO. 1:

Include the tract and parcel of the site if now available.

BAS RESPONSE:

Review of Los Angeles County Surveyors Map No. B-2449, January 1958, indicates the site is Parcel No. 2 of Record of Survey (R.S.) 53-30-32. The site is located in Township 4, South, Range 13 West as noted in the USGS Torrance quadrangle.

RWQCB COMMENT NO. 2:

The background lysimeter should logically be in the same vicinity as the background well.

BAS RESPONSE:

Agreed. See Figure 2 for this new location.

RWQCB COMMENT NO. 3:

The well casing filter pack should be selected according to the gradation of the filter pack, which should be determined from a sieve analysis of the formation sediment.

BAS RESPONSE:

See response to Section 3.3.3, Subsection 5 and Figure 3. The filter pack will be selected in the field based on the formation sediment.

RWQCB COMMENT NO. 4:

Cr (VI) analysis does not require acid preservation as do the other metal analyses.

BAS RESPONSE:

Pg. 3-6: AT THE END OF SECTION 3.4.4, PARAGRAPH 2, SECOND BULLET WILL BE AMENDED AS FOLLOWS:

- All metal samples will be field filtered using a 0.45 micron filter then field acidified.

Pg. 3-6: AT THE END OF SECTION 3.4.4, PARAGRAPH 2, A THIRD BULLET WILL BE ADDED AS FOLLOWS:

- Samples for general parameters (TDS, Chloride, Sulfate, Nitrate, Alkalinity and COD) will be collected in one liter glass bottles with no preservatives. Chromium (VI) analysis will also be obtained from this sample.

RWQCB COMMENT NO. 5:

AAS is the preferred method for As, Se, Mg, Hg, and Cr (VI).

BAS RESPONSE:

Pg. 3-9: SECTION 3.4.12, No. 2 WILL BE AMENDED AS FOLLOWS:

DELETE "ICAP"

"2. AAS heavy metal scan to include the 22 metals listed in the amendments to the SWAT."

RWQCB COMMENT NO. 6:

Indicator parameter stability is required during the purge of high yield wells. Define your stabilization requirements.

BAS RESPONSE:

Pg. 3-6: SECTION 3.4.5 WELL EVACUATION, PARAGRAPH 2 - HIGH YIELD WELLS, THE FIRST BULLET WILL BE DELETED AND A NEW BULLET ADDED AS FOLLOWS:

<u>High-yield wells</u>

- o Test for pH, and specific conductance before, during and after purging and sample withdrawal to help determine purging efficiency.
- o Indicator parameter stability (pH, temp and sp. conductance) will be achieved during purging if three successive readings are within 5% of each other. Readings will be taken at intervals based upon each 20% of one well volume in gallons evacuated and at the beginning and end for pumping or bailing. For a well in which one well volume is equal to 50 gallons readings will be taken after purging 0, 10, 20, 30, 40 and 50 gallons and so on as necessary. If indicator parameter stability is achieved or at least one volume of water is purged (whichever is the greater volume), the well will be considered to have been properly evacuated.

RWQCB COMMENT NO. 7:

Downgradient lysimeters should be as close to the fill as possible, and angled under the fill if possible.

BAS RESPONSE:

SEE THE NEW SECTION 3.5, VADOSE ZONE WELL INSTALLATION.

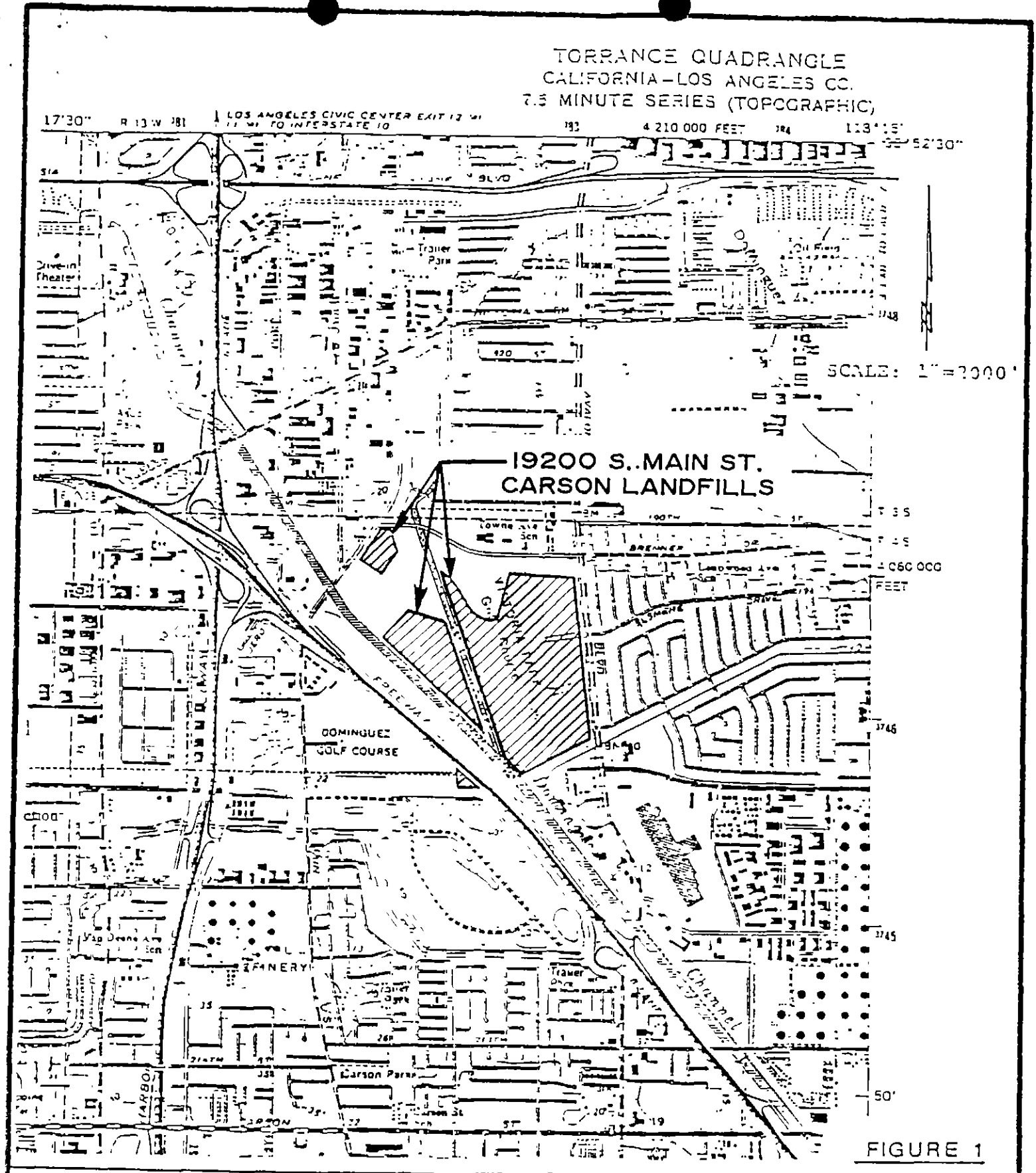
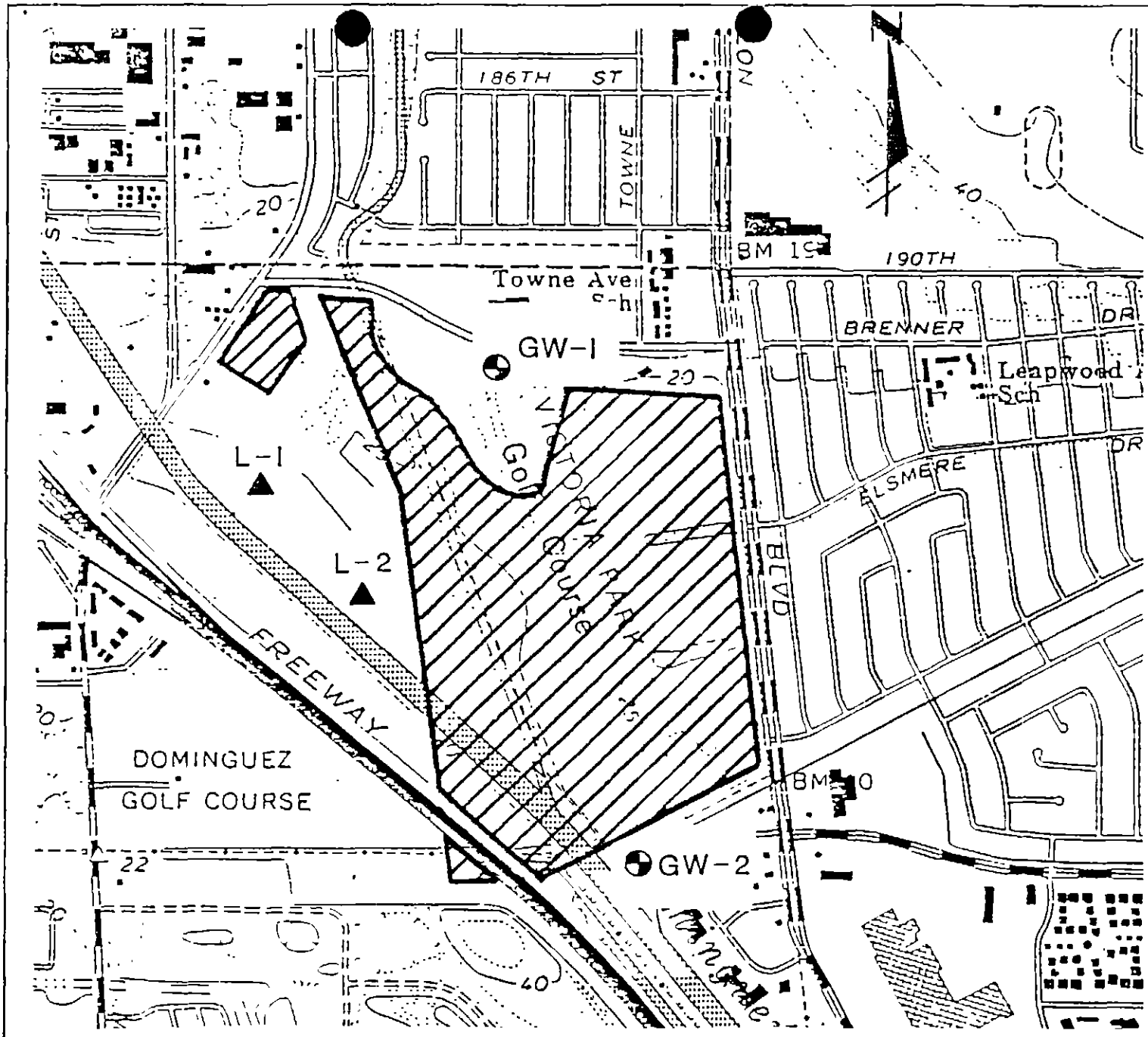


FIGURE 1

BAS
(714) 594-5008
BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS
1198 FAIRWAY DR • P.O. BOX 7065 • HOUSTRY CA 91744

SITE LOCATION MAP
19200 S. MAIN ST.
CARSON, CA.

JOB NO.	8814
DATE	6/88
DRAWN BY	DS
CHECKED BY	AR



LEGEND

▲ L- LYSIMETER

◓ GW- GROUND WATER MONITORING WELL

NOTE:

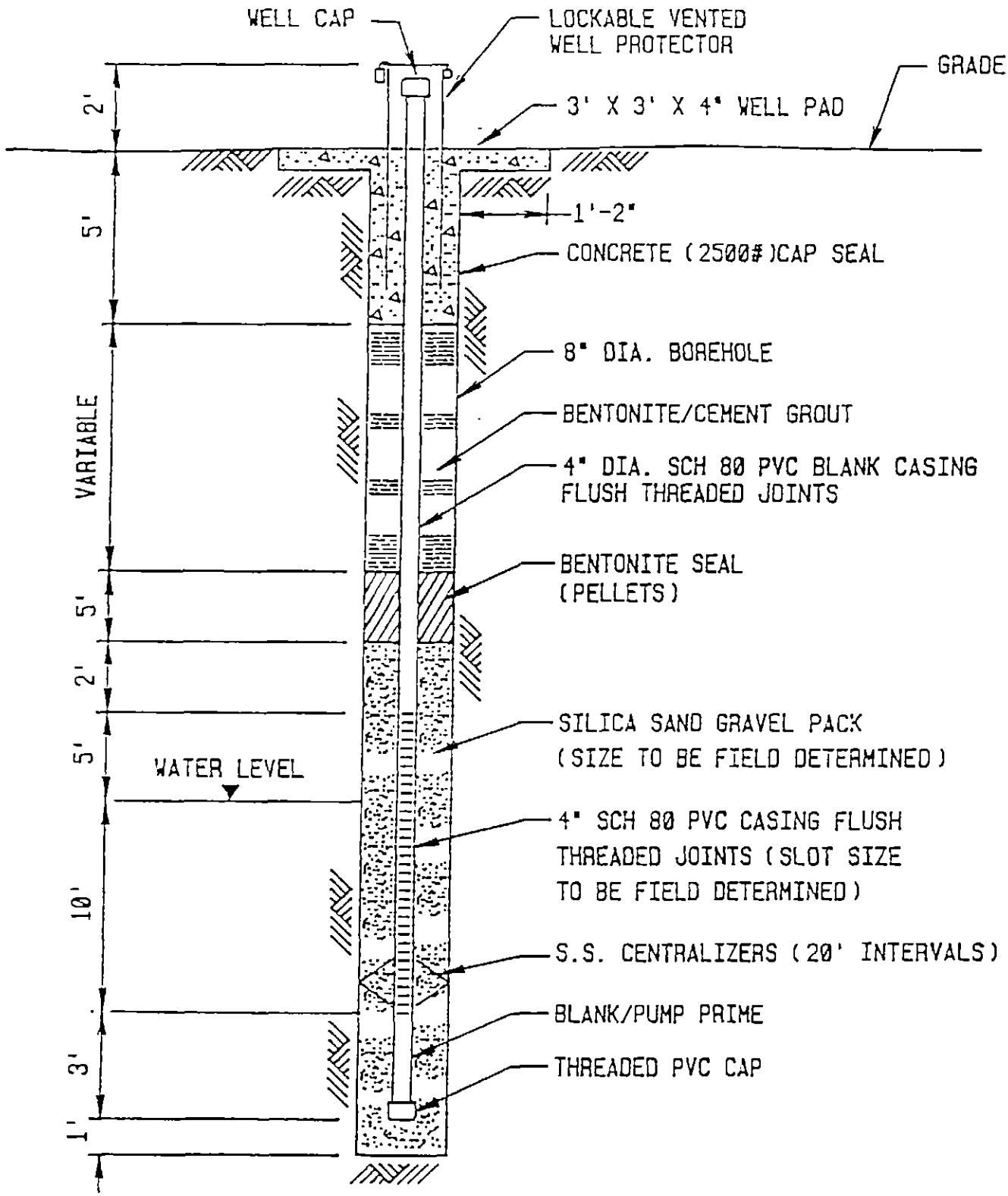
LIMITS OF REFUSE IS BASED ON 1956 D.W.R. INVESTIGATION NO.57-4-7

FIGURE 2

BAS
BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS
1199 FAIRWAY DR • P.O. BOX 7085 • INDUSTRY CA 91744
(714) 594-5008

PROPOSED MONITORING LOCATIONS SWAT INVESTIGATION

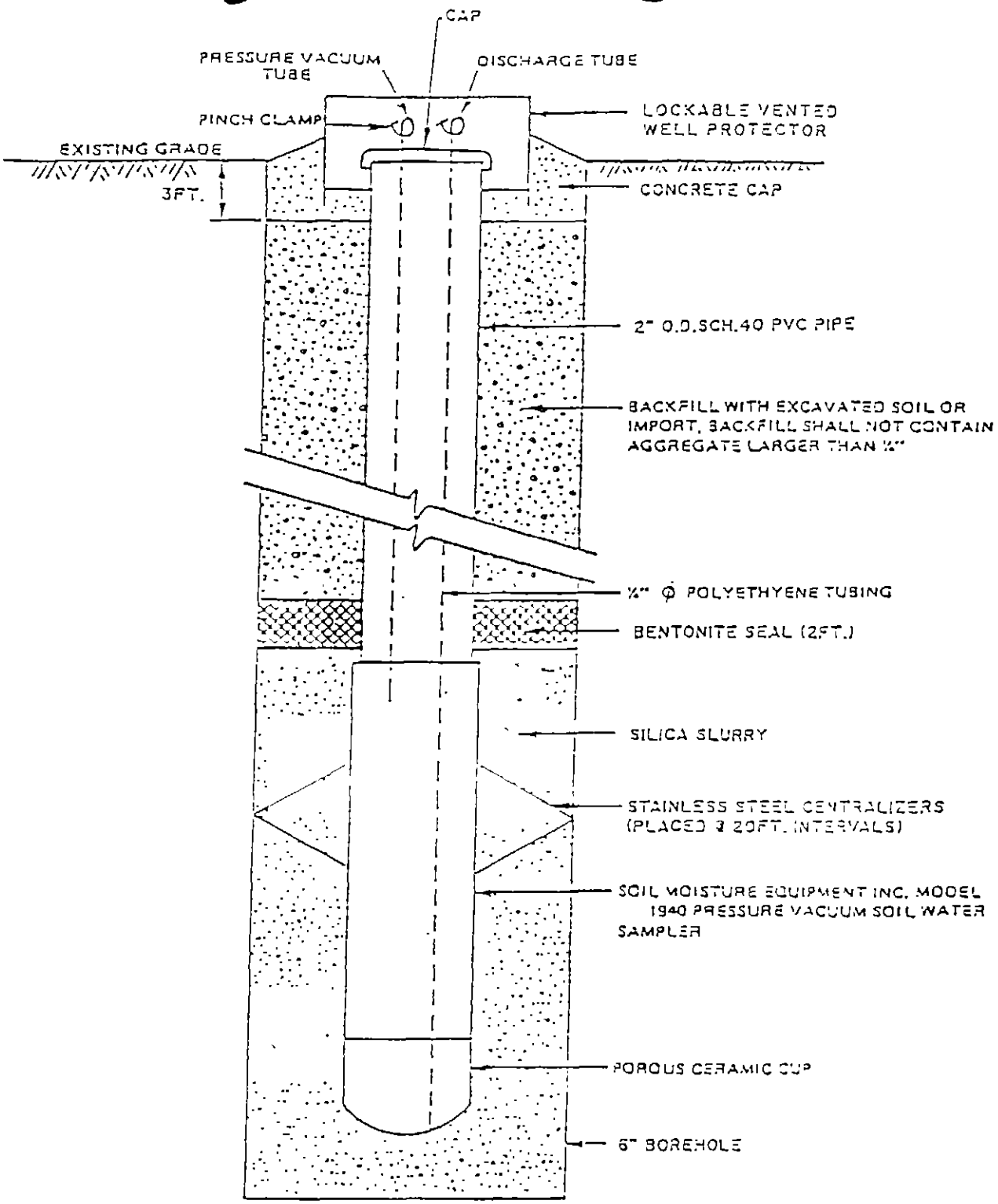
JOB NO.	
DATE	6/88
DRAWN BY:	RDS
CHECKED BY	DR



PROPOSED CONSTRUCTION DETAILS

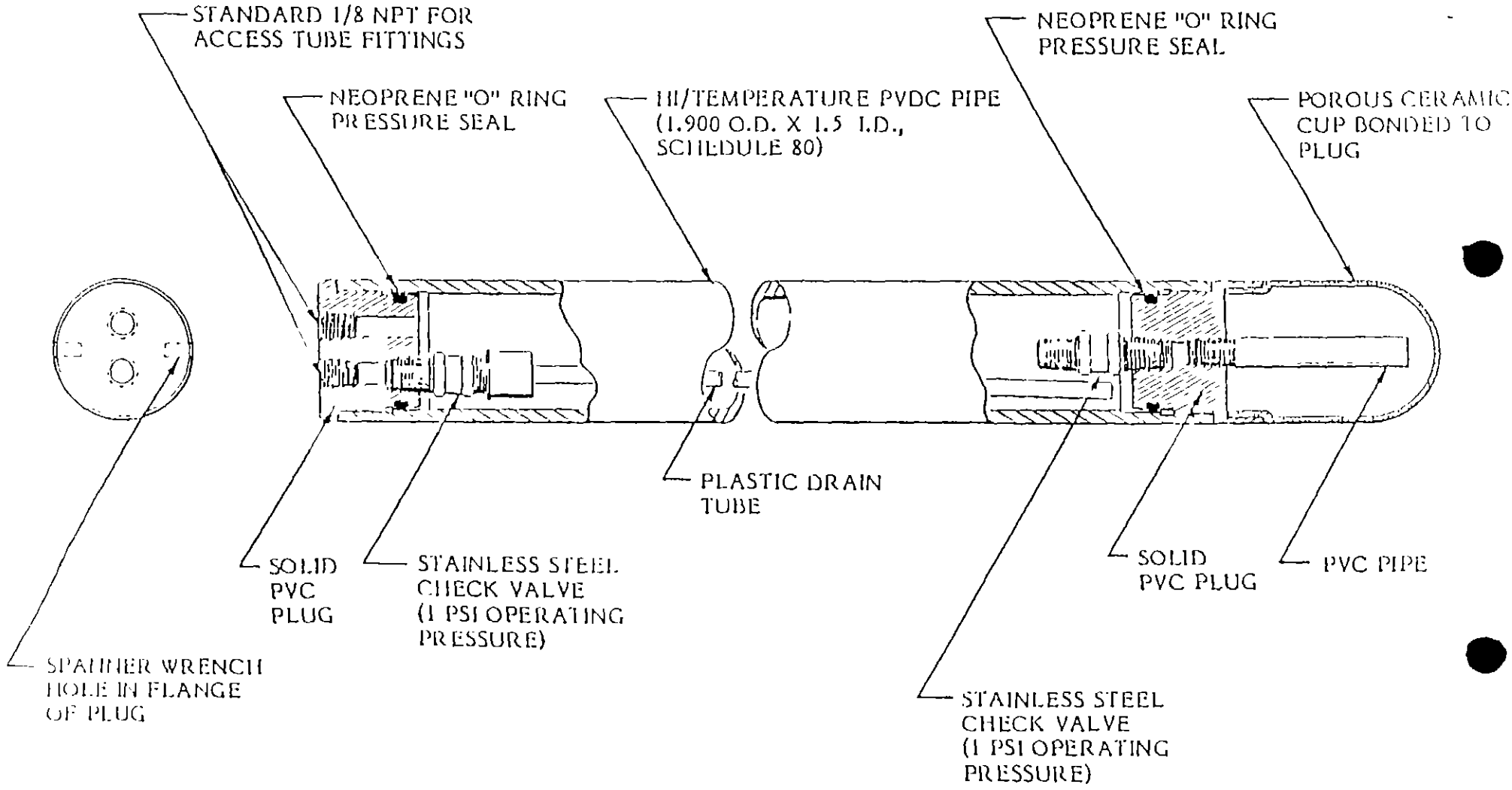
GROUND WATER MONITORING WELL (SHALLOW AQUIFER)

FIGURE 3



VADOSE WELL CONSTRUCTION DIAGRAM

FIGURE 4



MODEL 1940 HI/PRESSURE-VACUUM SOIL WATER SAMPLER

OVERALL DIMENSIONS: 1.9" OUTSIDE DIAMETER BY 24" LONG

FIGURE 5

BRYAN A. STIRRAT & ASSOCIATES

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL AND ENVIRONMENTAL ENGINEERS

May 11, 1989

Michael E. Taweel
Senior Engineering Geologist
California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 4027
Los Angeles, California 90012-4596

Re: Response to Comment on Solid Waste Water Quality Assessment Test (SWAT) Proposal for the 19200 South Main Street, Carson Site (File Number 51-02)

Dear Sir:

Enclosed are our responses to your comments dated April 12, 1989. The responses have been formatted to include the RWQCB comments and our proposed revisions to the SWAT proposal. If these revisions are acceptable, a new revised SWAT proposal can then be prepared. I believe you will find the proposed revisions fully responsive to all of your comments.

Due to the shortness of time between now and July 1 (the official due date for the SWAT Report), it may be unreasonable to expect that a SWAT report can be filed by that date. A more appropriate date for filing the report would be one year from the date of approval of the SWAT proposal, to allow for one year of groundwater monitoring. It is requested that the RWQCB establish a new report date for this site one year from the approval date of the SWAT proposal to provide for good engineering practices and the one year of quarterly groundwater monitoring.

I have also been requested by BKK Corporation to advise you that submission of these revisions does not constitute an admission by BKK Corporation for any liability for preparation of reports or remediation in connection with this site.

Should you have any questions or require additional information, please advise.

Very truly yours,

Arjun Rajaratnam, Director
Environmental Services Division

Enclosure

cc: Mr. Ken Kazarian - BKK Corporate
Mr. Ron Gastelum, Esq - BKK Corporate
Bryan A. Stirrat - BAS
Rudy Coto - BAS

1199 Fairway Drive • Walnut, CA 91789 • (714) 594-5008 • FAX (714) 595-6222

RESPONSE TO RWQCB COMMENTS,

DATED APRIL 12, 1989 AND PROPOSED AMENDMENTS TO

SWAT PROPOSAL FOR THE 19200 S. MAIN STREET LANDFILL

RWQCB COMMENT NO. 1:

A minimum of three wells are necessary to determine both horizontal components of a groundwater gradient. In addition to the two proposed monitoring well locations, at least one more well should be proposed, in the far northwest section of the landfill. After installing these three wells, water level measurements should be taken and a water level contour map constructed. From this preliminary data, and your arguments either for or against any additional wells, we will review the adequacy of the proposed system. Please note that Section 13273 (e) of the California Water Code allows staff to require an additional year of SWAT monitoring if we determine that the original SWAT Program was inadequate.

BAS RESPONSE:

Pg. 3-2: SECTION 3.3 WILL BE AMENDED AS FOLLOWS:

"The initial well bore hole density will be 3 wells as shown in Figure 2. (Figure 2 has also been amended to show the new locations of wells)."

Pg. 3-2: SECTION 3.3.1, PARAGRAPH 2 (FIRST BULLET ITEM), FIRST SENTENCE IS AMENDED AS FOLLOWS:

"o One monitoring well will be located upgradient of the site and two monitoring wells will be located downgradient."

Pg. 3-3: SECTION 3.3.2, FIRST SENTENCE WILL BE AMENDED AS FOLLOWS:

"All bore holes (Figure 2) shall be drilled into the first water table."

Pg. 3-3: SECTION 3.3.3, PARAGRAPH 2, FIRST SENTENCE WILL BE AMENDED AS FOLLOWS:

"2. Groundwater bore holes shall be drilled using an 8 inch hollow stem auger."

Pg. 3-3: SECTION 3.3.3, PARAGRAPH 5, WILL BE AMENDED AS FOLLOWS:

"5. Wells shall be constructed as shown in Figure 3. Well filter packs, size and gradation will be determined from a sieve analysis of the formation sediment. Based on our experience in this area, BAS believes a 20/40 Monterey Sand may be appropriate. "(An amended Figure 3 is included.)

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, *Governor*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION

107 SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012—4596
(213) 620-4460

April 12, 1989

Mr Kenneth B. Kazarian
President
BKK Corporation
2550 237th Street
Torrance, California 90505

SOLID WASTE WATER QUALITY ASSESSMENT TEST (SWAT) PROPOSAL REVISION - BKK CARSON SITE (FILE NO. 51-02)

We have reviewed the revised SWAT Proposal for the Carson Site and have found that it does not fully meet the requirements and/or guidelines of Section 13273 of the California Water Code in the following areas:

1. A minimum of three wells are necessary to determine both horizontal components of a ground water gradient. In addition to the two proposed monitoring well locations, at least one more well should be proposed, in the far northwest section of the landfill. After installing these three wells, water level measurements should be taken and a water level contour map constructed. From this preliminary data, and your arguments either for or against any additional wells, we will review the adequacy of the proposed system. Please note that Section 13273(e) of the California Water Code allows staff to require an additional year of SWAT monitoring if we determine that the original SWAT Program was inadequate.

2. An additional lysimeter should be proposed to better cover the vadose zone.

3. The required organic priority pollutant analyses methods are EPA Methods 601 and 602 or 624, and EPA Method 625. Also oil & grease should be added to the parameter list. If EPA 601/602 or 624 does not include acetone and 2-butanone, perform EPA 1624 also.

4. To complete the QA/QC program, propose to sample one of the downgradient wells in duplicate.

5. The proposed vadose monitoring plan is incomplete. Include complete plans and specifications as you did for the ground water plan.

6. Surface water monitoring is also required. Submit complete plans and specifications as outlined in the SWAT Guidelines.

7. Indicate which statistical method(s) will be used to determine if the site is impacting the nearby ground and surface waters.

In addition to the above SWAT deficiencies, we have the following additional comments/requirements:

1. Include the tract and parcel of the site if now available.

2. The background lysimeter should logically be in the same vicinity as the background well.

3. The well casing filter pack should be selected according to the gradation of the filter pack, which should be determined from a sieve analysis of the formation sediment.

4. Cr (VI) analysis does not require acid preservation as do the other metal analyses.

5. AA is the preferred method for As, Se, Mg, Hg, and Cr (VI).

6. Indicator parameter stability is required during the purge of high yield wells. Define your stabilization requirements.

7. Downgradient lysimeters should be as close to the fill as possible, and angled under the fill if possible.

Please submit the above requested information by May 12, 1989. If you have any questions, please contact Clay Booher at (213) 620-5459.

MICHAEL E. TAWEEL
Senior Engineering Geologist

cc: Jim Parsons, SWRCB, Division of Water Quality
Arjun Rajaratnam, Bryan A. Stirrat & Associates

BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS

TRANSMITTAL LETTER

TO: Regional Water Quality Control Bd
107 S. Broadway, Room 4027
Los Angeles, CA 90012

DATE: June 7, 1988

ATTENTION: Ray Delacourt, Senior Water Resources Control Board

PROJECT: SWAT Proposal

JOB NUMBER: 8814

WE TRANSMIT BY:

[X] COURIER [ ] MAIL [ ] U P S [ ] _____

THE FOLLOWING:

One (1) copy SWAT Proposal for 19200 Main Street with revisions.

FOR YOUR:

[ ] APPROVAL [ ] INFORMATION [X] PER YOUR REQUEST
[ ] FILE [ ] REVIEW [ ] USE
[ ] _____

REMARKS:

BY A Rajaratnam

Arjun Rajaratnam
Director
Environmental Services Division

1199 Fairway Drive Walnut, CA 91789 [714] 594-5008 FAX [714] 595-6222

BAS
BRYAN A. STIRRAT & ASSOCIATES
CONSULTING CIVIL ENGINEERS

June 7, 1988

Raymond K. Delacourt
Senior Water Resource Control Engineer
Regional Water Quality Control Board
107 South Broadway, Suite 4027
Los Angeles, California 90012

SUBJECT: FILE NO. 51-02

Dear Mr. Delacourt:

As per your letter of May 20, 1988, enclosed herein is a revised Solid Waste Assessment Proposal (SWAT). A new section 3 that details the installation of groundwater and vadose zone monitoring wells and quarterly sampling program has been included.

I believe the enclosed SWAT proposal will be fully responsive to the requirements of the water code.

Should you have any questions, please feel free to call me at (714) 594-5008.

Sincerely yours,

Arjun Rajaratnam, Director
Environmental Services Division

AR/cg

1199 Fairway Drive • P O Box 7085 • City of Industry, CA 91744 • (714) 594-5008

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, Governor
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION
107 SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012-4596
(213) 620-4460

May 20, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUEST
Claim No. 146495

Mr. Kenneth B. Kazarian, President
BKK Corporation
2550 237th Street
Torrance, CA 90505

SOLID WASTE WATER QUALITY ASSESSMENT TEST (SWAT) PROPOSAL
BKK CARSON SITE (19200 SOUTH MAIN - CARSON)
(FILE NO. 51-02)

We have reviewed your SWAT Proposal for the subject site and found the Proposal to be grossly inadequate.

Your Proposal contains very little information about the subject site and no provisions were made for surface, groundwater and vadose zone monitoring as required in our letter to you dated January 15, 1988.

In the transmittal letter for your proposal, you requested our clarification on "leakage of hazardous waste." Hazardous waste is any material coming off the subject site which meets the definition of Article 9 and/or satisfies any of the criteria of hazardous waste presented in Article 11 of Chapter 30, Division 4, Title 22, California Administrative Code as detected by a surface, groundwater and/or vadose zone monitoring program. Your transmittal letter also informed us that you do not acknowledge a legal obligation to submit this (the SWAT Proposal) report or any other information regarding this property. BKK Company (now BKK Corporation) was the operator of the subject site, between 1948 and 1959 as stated in your Proposal and as such is fully responsible to submit a SWAT to this Regional Board. This responsibility for compliance with the SWAT requirements is clearly stated in Section 13273 et. seq. California Water Code.

You are directed to revise your SWAT Proposal so that it will contain all the required information as called for in the draft guidance sent to you on January 15, 1988. Your revised Proposal must be submitted to this office by June 6, 1988.

Failure to submit an adequate SWAT Proposal by the above date will result in appropriate enforcement action.

If you have any questions, please contact Mr. Quang Nguyen at (213) 620-5459.

Raymond K. Delacourt

RAYMOND K. DELACOURT
Senior Water Resource
Control Engineer

cc: Jim Parsons, State Water Resources Control Board, Division of Water Quality
Bryan Stirrat, Bryan A. Stirrat & Associates
Ron Gastelum, BKK Corporation

To: RKD, File
From: QN

BKK CARSON SITE - SWAT PROPOSAL

Staff has reviewed the SWAT proposal for the subject site and ~~found~~ finds it to be grossly inadequate.

Except for some obvious data (name of site, location, permits, ownership ...) BKK did <u>not</u> propose any monitoring for surface, groundwater and/or vadose zone. No geology of site was given and waste characteristics were poorly presented. In their cover letter for the proposal, BKK requested our clarification on the "leakage of hazardous waste" and also informed us that they do <u>not</u> acknowledge a legal obligation to submit the proposal or any other report regarding this property because they're not the "owner" of the property. Staff feels that this is only buying time and BKK should have done a much better job on this.

<u>Action</u>: letter drafted requesting add. info to be submitted ~~in 2 weeks~~ by 6/6.

QN
5/16/88

RKD 5/18

SWAT PROPOSAL

BKK Public Dump – Carson [51-2]

I. Intro Data

A. Certification by qualifier OK ✓

B. Site Name

BKK Public Dump
(Carson Site)

located 3/4 mile SE of intersection of I-110 & I-405
The landfill commenced operation in July, 1948 and accepted various domestic & industrial wastes. The method of OP used was cut & cover.
the majority of the site is now the Victoria Golf Course owned & operated by Co/LA. A small portion of the historical limits of the landfill appear to be part of the Goodyear Airship Operations Center.

19200 S. Main / Carson Site ✓

C. Operator & Owner ✓

current owner Co of LA
BKK Company
530 W. 6th st
Los Angeles 14, California
} between 1948 to 1959

D. Site Location ?

19200 S. Main St, Carson, CA

* No township, range, section, & fractional section
* No County Assessor's parcel no(s).

DATE?

E. classified as a Class II (former class.) opened to public & private users. ✓

Capacity & quantities of waste

1. Disposal records are not available.

estimated between 3 to 5 million tons of waste may be in place.

based on permit conditions

from +5' to +22' of GS Sea level datum.

F. No enforcement orders, No ACLs on the site.

G. Closure Date

It is uncertain as to the actual date of closure of the landfill. Probably ceased sometime 1959.

No Closure Plan.

No description of final cover except ~~for~~ from IW Permit No. 31.

$$d = \frac{m}{V} \quad \frac{lbs}{ft^3}$$

BKK Carson - SWAT proposal

(3)

II. Site Info

1. No leachate collection & removal systems & leak detection systems. No analyses.

2. liner deposited below elv +5' USC & GS
   No description

3.

BKK LANDFILL BKK 2210 SO. AZUSA AVENUE • WEST COVINA, CA 91791 • (818) 965-0911

March 31, 1988

88 MAR 22 AM 10:
LOS ANGELES REGION

Dr. Robert Ghirelli
Executive Director
Regional Water Quality Control Board
107 South Broadway, Suite 4027
Los Angeles, California 90012

RE: Your File No. 51-02

Dear Dr. Ghirelli:

The BKK Corporation hereby submits the enclosed report in response to your letter of January 15, 1988.

The report is necessarily limited because very few records of this operation are available to us. However, our investigation of County Engineer records is continuing and we are hopeful that more information will be forthcoming. Nonetheless, the report contains essential information regarding types of wastes disposed and groundwater hydrology.

Please clarify what is meant in your letter by "leakage of hazardous waste". Although the disposal site only accepted nonhazardous wastes permitted by your Board, the approved design criteria did not require absolute containment of all potentially hazardous constituents in the waste (e.g., household hazardous waste). Water quality protection assurance was principally based on the unsuitability of the native groundwater for drinking water purposes and the absence of incompatible surrounding land uses. However, please advise if it is now the Board's position that landfill gas, or constituents thereof, is a "hazardous waste", or if the native groundwater is now deemed to be a source of drinking water.

BKK Corporation does not own the property in question. As a result we do not have access to the property for any confirmatory testing. Although we do not acknowledge a legal obligation to submit this report or any other information regarding this property, we are submitting this report in an effort to cooperate with the Board, and to share all information available to us to assist the Board in its effort to assess this site.

LOS ANGELES REGION

Should you have any questions or require additional information, please advise.

Very truly yours,

Ronald R. Gastelum, Esq.
General Counsel

RRG/cg

BKK CORPORATION

2550 237TH STREET • P.O. BOX 3038 • TORRANCE, CALIFORNIA 90510
(213) 539-7150

February 29, 1988

Mr. Raymond K. Delacourt
Senior Water Resource Control Engineer
California Regional Water Quality
Control Board - Los Angeles Region
107 South Broadway, Suite 4027
Los Angeles, California 90012-4596

Re: Your File No. 51-02

Dear Mr. Delacourt:

We have received your letter dated January 15, 1988 notifying us of a SWAT report requirement for a landfill designated as the BKK Carson Site. In order to respond to the Board's request we will appreciate an opportunity at your earliest convenience to review the Board's files on the 19200 South Main-Carson site. Please advise when we can view the files.

Thank you for your cooperation.

Very truly yours,

Ronald R. Gastelum
General Counsel

RRG:sll

File No. 51-02

No. 146930

RECEIPT FOR CERTIFIED MAIL—30¢ (plus postage)

SENT TO	POSTMARK OR DATE
Mr. Ken Kazarian, President	
STREET AND NO BKK Corporation	
P.O. STATE AND ZIP CODE 2210 South Azusa Avenue West Covina, CA 91791	

OPTIONAL SERVICES FOR ADDITIONAL FEES

RETURN RECEIPT SERVICES	1. Shows to whom and date delivered	15¢
	With restricted delivery	65¢
	2. Shows to whom date and where delivered	35¢
	With restricted delivery	85¢
RESTRICTED DELIVERY		50¢
SPECIAL DELIVERY (extra fee required)		

PS Form 3800 Aug. 1975

NO INSURANCE COVERAGE PROVIDED—NOT FOR INTERNATIONAL MAIL

(See other side)

☆ GPO 1975—O-591-452

KP

PS Form 3811, July 1983

DOMESTIC RETURN RECEIPT

SENDER Complete items 1, 2, 3 and 4

Put your address in the 'RETURN TO' space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☒ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to

Mr. Ken Kazarian, President
BKK Corporation
2210 South Azusa Avenue
West Covina, CA 91791

4. Type of Service

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number: 146930

Always obtain signature of addressee or agent and DATE DELIVERED

5. Signature – Addressee
X

6. Signature – Agent
X Ken Caldwell

7. Date of Delivery
1-20-88

8. Addressee's Address (ONLY if requested and fee paid)
2210 S. AZUSA
WEST COVINA CA 91792

STATE OF CALIFORNIA
GEORGE DEUKMEJIAN, Governor
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION
107 SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012-4596
(213) 620-4460

January 15, 1988

Mr. Ken Kazarian, President
BKK Corporation
2210 South Azusa Avenue
West Covina, CA 91790

SOLID WASTE WATER QUALITY ASSESSMENT TEST (SWAT)
BKK CARSON SITE (19200 SOUTH MAIN - CARSON)
(FILE NO. 51-02)

Section 13273 of the California Water Code required the State Water Resources Control Board to rank all solid waste disposal sites throughout California based upon the threat which they may pose to water quality. On or before July 1, 1987 the operators of the first 150 sites ranked on the list were required to submit a SWAT to the appropriate Regional Water Quality Control Board (Regional Board). On or before July 1 of each succeeding year, the operators of the next 150 solid waste disposal sites ranked on the list are required to submit a SWAT to the Regional Board.

The report shall contain an analysis of the surface and groundwater on, under, and within one mile of the solid waste disposal site to provide a reliable indication whether there is any leakage of hazardous waste; and a chemical characterization of the soil-pore liquid in those areas which are likely to be affected if the solid waste disposal site is leaking, as compared to geologically similar areas near the solid waste disposal site which have not been affected by leakage or waste discharges.

Recent amendments to Section 13273 (AB 1897, Statutes of 1987) provide possible exemptions from the SWAT requirements if a disposal site contains no hazardous waste and has a volume of less than 50,000 cubic yards of waste. If these criteria apply, and you wish to seek an exemption, please contact this office within 30 days after receipt of this letter. Other provisions of AB 1897 include extending the responsibility for compliance with Section 13273 to past and present owners of the site in the event the site operator no longer exists, or is unable to comply with the requirements.

The SWAT consists of a two-phase submittal: an initial SWAT Proposal and a final SWAT Report. Enclosed is a copy of the draft guidance for both the SWAT Proposal and SWAT Report. It is expected that the final guidance will be similar to the draft guidance. We will send the final guidance when it becomes available but you are directed to proceed using the draft guidance nonetheless.

For those sites where hazardous wastes are known to be leaking through existing monitoring programs or from other information, the operator may apply to the Regional Board for a waiver from the SWAT requirements. The request for a waiver should include all the information in Section I of the SWAT Proposal guidance and Section V of the SWAT Report guidance and would be due on the same date the SWAT Proposal would have been due.

The subject solid disposal site is in Rank 3; as such, its SWAT Proposal must be submitted to this Regional Board by April 1, 1988, and its SWAT Report is due by July 1, 1989.

Request for SWAT Program proposals and related information are made pursuant to California Water Code Section 13267. Failure to submit the requested information may subject you to administrative civil liability of up to $1000.00 for each day the information is past due, pursuant to Water Code Section 13268. If hazardous waste is leaking from your facility, failure to submit the SWAT report any result in civil liability of up to $5000.00 per day of violation.

If you have any questions, please call Leha Tran at (213) 620-5431.

Raymond K Delacourt

RAYMOND K. DELACOURT
Senior Water Resource
Control Engineer

Enclosure

cc: Jim Parsons, State Water Resource Control Board, Division of Water Quality

Mr. John A. Lambie, County Engineer
County of Los Angeles
354 S. Spring Street - Rm. 619
Los Angeles 13, California

February 27, 1959

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

SUBJECT: Los Angeles County Industrial Waste Permit No. 31
Dated Modification - 12-29-58
PERMITTEE: B.K.K. Company
OPERATIONS ADDRESS: 19200 South Main St., Dominguez
Your File No.: I-416
Our File No.: 51-2

Reference is made to your letter which transmitted Industrial Waste Permit of number and date indicated above to subject permittee, copies of which were furnished to this Board.

Pursuant to administrative procedures established between your office and this Board, and to prevent a condition of pollution in the receiving waters, and to prevent the creation of a nuisance in the disposal area, in compliance with Section 13054 of the State Water Code, the Los Angeles Regional Water Pollution Control Board No. 4 at its regular meeting held on February 26, 1959, approved as the requirements of this Board the conditions and limitations pertaining to water pollution and nuisance to be contained in above referenced Los Angeles County Industrial Waste Permit.

For your convenience, there is enclosed a copy of this letter for transmittal to said permittee in accordance with administrative procedures established between your office and this Board.

Very truly yours,

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

BY Linne C. Larson
LINNE C. LARSON, Executive Officer

LCL:ef
(In duplicate)
FORM R-3

REQUIREMENT NO. 2202

In the writer's opinion only the last item "acid sludges" is specifically indicated as unacceptable by the County. It could possibly be interpreted that "toxic salts of metals" is also excluded by the County although for all practical purposes it would appear that such would be accepted in practice.

It will be also noted that the Division of Fish and Game recommend against "all products of petroleum origin including waste products from refining and drilling operations and any other substances toxic to aquatic life." These are extremely broad requirements but would appear in effect to be embraced by the Division of Water Resources requirements.

Matthew G. Eggett

MGE/lf

File 51-2

JOHN A. LAMBIE
COUNTY ENGINEER

FORD S. DODDS
CHIEF DEPUTY

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION

619 H. W. HELLMAN BUILDING
354 SOUTH SPRING STREET
LOS ANGELES 13, CALIFORNIA
MADISON 9-4747

ARTHUR PICKETT
DIVISION ENGINEER

JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
DEC 31 1958
LOS ANGELES

December 29, 1958

E. C. LARSON
JAN 5 1959
R. M. HERTEL
DEC 31 1958

CERTIFIED MAIL

B.K.K. Company
530 West 6th Street
Los Angeles 14, California

M. G. EGGETT
DEC 31 1958
J. H. HANSON
DEC 31 1958

Attention Mr. Ben Kazarian, President

Gentlemen:

B.K.K. COMPANY (I-416)

On December 16, 1958 the Industrial Waste Committee considered your request to accept for disposal, at your site, located at 19200 South Main Street a waste material consisting primarily of printers ink. The specific waste product considered is obtained from the California Rotogravure Company, 2833 East 11th Street, Los Angeles.

Printers ink, containing small amounts of solvent, is acceptable at your site providing that this material is mixed with rubbish and the amounts received do not exceed the limits stated in Item 3.402 of your "Standard Conditions and Limitations."

Effective immediately upon receipt of this letter the Conditions and Limitations of your Industrial Waste Permit are amended by the addition to Section 2.400 of the following:

2.413 Occasional loads of printers ink containing small amounts of solvent.

A copy of this letter shall be attached to your "Standard Conditions and Limitations" and remain on the site at all times.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Original Signed

Arthur Pickett
Division Engineer
Industrial Waste Division

AGP-JWH:IW

L. C. LARSON
FEB 20 1958

LCL-

2-18-58

re: BKK Dump File 51-2

Attached is the latest revision of the subject company's County permit. This is now written to comply with our recommendations in respect to minimum elevation.

You will also note that on page 3 is a list of all the semi-liquids that to date the county has listed for acceptance at Class II dumps subject to the special merging and no-ponding provisions. I feel that all items except e., f., and g. are consistent with Board policy. Items f. and g. are poorly described but it is my understanding that these are the solids remaining in the traps and are repulped only with

sufficient water to make fluid. As such I feel that items f and g are acceptable. This leaves item e.

Item e. (synthetic silicate catalyst) is the same as we have recently discussed for 213th St and Alameda dumps. Symonds of the County agrees that it would be appropriate if we withheld recommendation on this item awaiting Board action.

Also enclosed is the rest of the permit now in force. Please note item 39 on page 6. It is in conflict with the presently proposed revision. Should we call this to the County's attention or let go as is? MJS

5/-2



November 3, 1958

Mr. Linne C. Larson, Executive Officer
Reg. Water Pollution Control Bd. No. 4
504 Spring-Arcade Building
541 South Spring Street
Los Angeles 13, California

L. C. LARSON
NOV 12 1958

Attention Mr. Matthew Eggett

Gentlemen:

APPLICATION FOR BUSINESS LICENSE RENEWAL
B. K. K. COMPANY (I-416)
19200 South Main Street, Dominguez

Section 2231 (g) of Ordinance No. 5860 (Business License Ordinance) provides that the County Engineer shall certify to the Board of Supervisors:

"Whether any other interested officer, department, or agency has indicated that applicable ordinances or regulations can be met by the applicant".

You are requested to indicate below whether ordinances or regulations under your jurisdiction can be met by subject applicant, and return the attached copy to this office by November 17, 1958.

Yours very truly,

John A. Lambie
COUNTY ENGINEER
By Harold W. Symmonds
Asst Engineer

Arthur Pickett, Division Engineer
Industrial Waste Division

AGP-LQ:IW
Enc.

The above applicant (can) (cannot) meet all applicable ordinances or regulations under the jurisdiction of this office.

Remarks: The operations at this site have been reviewed by this Board and compliance with the conditions and limitations pertaining to water pollution and nuisance contained in the Los Angeles County Industrial Waste Permit will meet the requirements of this Board.

Signed M. G. E.

#152-10/58

MEMBERS

RAY L. DERBY, CHAIRMAN
Los Angeles

C. E. ARNOLD
Los Angeles

FRED C. SNODGRASS
Ventura

GILBERT C. VAN CAMP
Terminal Island

JOHN B. WENTZ
Beverly Hills

GOODWIN J. KNIGHT
GOVERNOR

STATE OF CALIFORNIA

OFFICE OF
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
LOS ANGELES REGION
ROOM 504, SPRING-ARCADE BUILDING
541 SOUTH SPRING STREET, LOS ANGELES 13
TEL. MA 6-1515, EXT. 2355

LINNE C. LARSON
EXECUTIVE OFFICER

October 23, 1958

COPY

Mr. John A. Lambie, County Engineer
County of Los Angeles, Industrial Waste Divn.
Room 619 - 354 South Spring St.,
Los Angeles 13, California

Subject: Standard Conditions and Limitations for Dumps

Attn: Mr. Arthur Pickett, Div. Engr.

Gentlemen:

Reference is made to our letter of September 22, 1958, which transmitted to you copies of proposed resolutions amending certain Industrial Waste Permits pursuant to the requests contained in your letter of July 31, 1958.

At its regular meeting held on October 16, 1958, this Board adopted the following resolutions, copies attached:

1. Resolution No. 58-69 (Amending Resolution No. 58-4 "Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the B.K.K. Public Dump in Los Angeles County") (File: 51-2).

2. Resolution No. 58-70 (Prescribing Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the Bradway and Main Corp. Dump in Los Angeles County)(File: 56-195).

3. Resolution No. 58-71 (Amending Resolution No. 58-26 "Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the Gardena Valley Dump in Los Angeles County"). (File: 56-133).

4. Resolution No. 58-72 (Amending Resolution No. 58-25 "Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the Alameda Street Public Dump"). (File: 52-236).

5. Resolution No. 58-73 (Prescribing Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the County Sanitation District No. 1, Moneta Ave. Dump in Los Angeles Co.)(File:53-212).

REQUIREMENT NO. 2123

Mr. John A. Lambie, County Engr. October 23, 1958

For your convenience there are enclosed copies of the above resolutions for transmittal to said permittees in accordance with administrative procedures between your office and this Board.

Very truly yours,
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

LINNE C. LARSON
Executive Officer

LCL:ef
Encls (In Duplicate)

10-16-1958

State of California
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
Los Angeles Region

RESOLUTION NO. 58-69

AMENDING RESOLUTION NO. 58-4
(REQUIREMENTS FOR THE DISPOSAL OF WASTES
AT A WASTE DISPOSAL FACILITY
COMMONLY KNOWN AS THE
B.K.K. PUBLIC DUMP IN LOS ANGELES COUNTY)
(File: 51-2)

WHEREAS, a waste disposal facility, commonly known as the B.K.K. Public Dump, is located at 19200 South Main St., Los Angeles County and is owned and operated by the B.K.K. Company, Inc.; and

WHEREAS, since this waste disposal facility is located within the unincorporated area of Los Angeles County, the County Engineer has issued to the B.K.K. Company, Inc., Industrial Waste Permit No. 31 containing certain conditions and limitations pertaining to water pollution and nuisance; and

WHEREAS, this Regional Water Pollution Control Board at its regular meeting held on April 10, 1958, has by Resolution No. 58-4 prescribed requirements for the disposal of wastes at said facility; and

WHEREAS, the County Engineer by letter of July 31, 1958, has referred certain amendments to the existing permit to this Regional Water Pollution Control Board for its approval; and

WHEREAS, the County Engineer in a letter dated August 7, 1958, has issued an amendment to Industrial Waste Permit No. 31 subject to approval of this Board; and

WHEREAS, the Board's staff has made an investigation of the amendment

NOW, THEREFORE BE IT RESOLVED, that in order to prevent pollution of the receiving waters and to prevent creation of a nuisance, this Regional Water Pollution Control Board, in accordance with authority granted in Division 7 of the Water Code of the State of California, prescribes the following modification of requirements for the disposal of wastes at the waste disposal facility commonly known as the B.K.K. Public Dump owned and operated by the B.K.K. Company, Inc., subject to the provisions of Section 13054 of said Water Code which read in part that "requirements may be revised from time to time:"

This Regional Water Pollution Control Board's Resolution No. 58-4 is revised to include under Provision B., which states: "Only the following listed materials shall be deposited above an elevation of +5'U.S.C. & G.S. Sea Level Datum of 1929" and a part of subparagraph"a) Solid material defined as ordinary household and commercial refuse and/or rubbish, garbage, other decomposable organic refuse, and scrap metal of the nature indicated below:"

the following additional items:

16. Hog manure and hog pen refuse

17. Paint in drums from which the major portion of liquids has been removed.

and as part of subparagrpah "b") Semi-liquid wastes as listed below:"

the following additional items:

10. Water containing lampblack and incidental amounts of mud resulting from floor washing.

11. Occasional loads of cutting oil containing small amounts of hydrocarbon oil.

BE IT FURTHER RESOLVED, that the existing requirements as set forth in Board's Resolution No. 58-4 are not modified except for the additions set forth above and that all applicable regulations which pertain to the subparagraphs cited apply to the additions thereto.

BE IT FURTHER RESOLVED, that the Executive Officer of this Board be authorized, and he is hereby directed, to certify and submit copies of this resolution to the County Engineer of Los Angeles County, and to such other agencies and individuals as may have need therefor, or as may request same.

I, Linne C. Larson, Executive Officer of the Los Angeles Regional Water Pollution Control Board, State of California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the Los Angeles Regional Water Pollution Control Board at the Board Meeting held on October 16, 1958.

Linne C. Larson

LINNE C. LARSON
Executive Officer

MGE:ef
9-17-58

State of California
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
Los Angeles Region

TENTATIVE

RESOLUTION NO._____

AMENDING RESOLUTION NO. 58-4
(REQUIREMENTS FOR THE DISPOSAL OF WASTES
AT A WASTE DISPOSAL FACILITY
COMMONLY KNOWN AS THE
B.K.K. PUBLIC DUMP IN LOS ANGELES COUNTY)
(File: 51-2)

WHEREAS, a waste disposal facility, commonly known as the B.K.K. Public Dump, is located at 19200 South Main St., Los Angeles County and is owned and operated by the B.K.K. Company, Inc.; and

WHEREAS, since this waste disposal facility is located within the unincorporated area of Los Angeles County, the County Engineer has issued to the B.K.K. Company, Inc., Industrial Waste Permit No. 31 containing certain conditions and limitations pertaining to water pollution and nuisance; and

WHEREAS, this Regional Water Pollution Control Board at its regular meeting held on April 10, 1958, has by Resolution No. 58-4 prescribed requirements for the disposal of wastes at said facility; and

WHEREAS, the County Engineer by letter of July 31, 1958, has referred certain amendments to the existing permit to this Regional Water Pollution Control Board for its approval; and

WHEREAS, the County Engineer in a letter dated August 7, 1958, has issued an amendment to Industrial Waste Permit No. 31 subject to approval of this Board; and

WHEREAS, the Board's staff has made an investigation of the amendment

NOW, THEREFORE BE IT RESOLVED, that in order to prevent pollution of the receiving waters and to prevent creation of a nuisance, this Regional Water Pollution Control Board, in accordance with authority granted in Division 7 of the Water Code of the State of California, prescribes the following modification of requirements for the disposal of wastes at the waste disposal facility commonly known as the B.K.K. Public Dump owned and operated by the B.K.K. Company, Inc., subject to the provisions of Section 13054 of said Water Code which read in part that "requirements may be revised from time to time:"

This Regional Water Pollution Control Board's Resolution No. 58-4 is revised to include under Provision B., which states: "Only the following listed materials shall be deposited above an elevation of +5'U.S.C. & G.S. Sea Level Datum of 1929" and a part of subparagraph"a) Solid material defined as ordinary household and commercial refuse and/or rubbish, garbage, other decomposable organic refuse, and scrap metal of the nature indicated below:"

the following additional items:

16. Hog manure and hog pen refuse

17. Paint in drums from which the major portion of liquids has been removed.

and as part of subparagrpah "b") Semi-liquid wastes as listed below:"

the following additional items:

10. Water containing lampblack and incidental amounts of mud resulting from floor washing.

11. Occasional loads of cutting oil containing small amounts of hydrocarbon oil.

BE IT FURTHER RESOLVED, that the existing requirements as set forth in Board's Resolution No. 58-4 are not modified except for the additions set forth above and that all applicable regulations which pertain to the subparagraphs cited apply to the additions thereto.

BE IT FURTHER RESOLVED, that the Executive Officer of this Board be authorized, and he is hereby directed, to certify and submit copies of this resolution to the County Engineer of Los Angeles County, and to such other agencies and individuals as may have need therefor, or as may request same.

I, Linne C. Larson, Executive Officer of the Los Angeles Regional Water Pollution Control Board, State of California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the Los Angeles Regional Water Pollution Control Board at the Board Meeting held on October 16, 1958.

MGE:ef
9-17-58

LINNE C. LARSON
Executive Officer

September 22,1950

COPY

Mr. John A. Lambie, County Engineer,
County of Los Angeles
Industrial Waste Division
Room 619 - 354 South Spring St.
Los Angeles 13, California

Subject: Standard Conditions and Limitations for Dumps

Attn: Mr. Arthur Pickett, Division Engr.

Gentlemen:

Reference is made to your letter of July 31, 1950, in which you advised this office that the County proposed to amend the Conditions of the Industrial Waste Permit for each of the following listed sites to allow acceptance of all of the materials listed in your letter, subject to limitations imposed by the permit, and requested this Board's approval of each of the following sites:

1. D.K.K. Disposal Company - 19200 Main St., Gardena, Calif.
   Industrial Waste Permit No. 31 - (Our File: 51-2)

2. Broadway and Main Corporation - 19135 South Broadway, Gardena, Calif.
   Industrial Waste Permit No. 1913 - (Our File: 57-195)

3. Gardena Valley Dump - 401 West 200th St., Gardena, Calif.
   Industrial Waste Permit No. 1739 - (Our File: 56-133)

4. Alameda Street Dump - 22746 South Alameda St., Dominguez.
   Industrial Waste Permit No. 834 - (Our File: 52-236)

5. Los Angeles County Sanitation Districts Landfall No. 3-Wasota Avenue between Griffith & Knox Streets, Gardena, Calif.
   Industrial Waste Permit No. 1138 - (Our File: 53-212)

The Board's staff has made an investigation of the above sites, and based upon this investigation the enclosed proposed resolutions, listed below, have been prepared for the Board's consideration:

Mr. John A. Lambie
Attn: Mr. Arthur Pickett

September 22, 1958

1. Amending Resolution No. 58-4 (Requirements for the Disposal of Wastes at a waste disposal facility commonly known as the B.K.K. Dump in Los Angeles County) (File No. 51-2).

2. Prescribing Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the Brooksby and Main Corporation Dump in Los Angeles County (File No. 57-195).

3. Amending Resolution No. 58-26 (Requirements for the Disposal of Wastes at a waste disposal facility commonly known as the Gardena Valley Dump in Los Angeles County). (File No. 56-133).

4. Amending Resolution No. 58-25 (Requirements for the disposal of wastes at a waste disposal facility commonly known as the Alameda Street Public Dump in Los Angeles County).(File No. 58-236).

5. Prescribing Requirements for the disposal of wastes at a waste disposal facility commonly known as the County Sanitation District No. 1 Mineta Avenue Dump in Los Angeles County. (File No. 53-212).

In accordance with established administrative procedures, this Board at its next regular meeting to be held on October 16, 1958, at 9:30 A.M. in Room 916, Times-Mirror Building, 145 South Spring Street, Los Angeles, California, will consider objections, submitted in writing on or before October 15, 1958, to any or all portions of the attached proposed resolutions.

At this meeting, reports and/or recommendations of State and local government agencies, facts brought out by protests, and the attached proposed resolutions, will be reviewed and considered by the Board.

The Board will then take final action by adopting the attached proposed resolutions.

Should objections be received which appear to have merit, the Board, at its discretion, may order further investigation before taking final action in adopting the attached proposed resolutions.

Very truly yours,

LESLIE C. LARSON
Executive Officer

LCL:ef
Enclosures

Eggett 51-2

COUNTY OF LOS ANGELES

DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION
108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

JOHN A. LAMBIE
COUNTY ENGINEER
FORD S. DODDS
CHIEF DEPUTY

ARTHUR PICKETT
DIVISION ENGINEER
JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

AUG 13 1958

August 7, 1958

CERTIFIED MAIL

L. C. LARSON
AUG 14 1958
R. M. HERTEL
AUG 13 1958
M. G. EGGETT
AUG 14 1958
J. H. HANSON
AUG 13 1958

B.K.K. Company
530 West Sixth Street
Los Angeles 14, California

Attention Mr. Ben K. Kazarian, President

Gentlemen:

B.K.K. COMPANY (I-416)

Effective immediately upon receipt of this letter your Industrial Waste Permit is amended as follows:

Items now listed as 2.214 and 2.215 are deleted from your permit and are replaced by:

2.214 Garbage-subject to limitations in Item 2.303.

2.215 Oil soaked excelsior or straw used to absorb hydrocarbon oils from waste water.

2.216 Hog manure and hog pen refuse containing substantial quantities of garbage and refuse from hog feeding operations.

2.217 Residue and grit from separation chambers from the Hyperion Sludge Plant-See Special Conditions, Item 10.004.

2.218 Paint in drums from which the major portion of liquids have been removed.

The following items are added to your permit:

2.411 Water containing lampblack and incidental amounts of mud resulting from floor washing.

2.412 Occasional loads of cutting oil containing small amounts of hydrocarbon oils.

10.004 (Special Condition) Residue and grit from separation chambers from the Hyperion Sludge Plant must be treated as follows:

a. This material must be covered immediately.
b. Such steps as are necessary be taken at all times to prevent fly breeding or odor nuisance.

This amendment is subject to approval of the Regional Water Pollution Control Board.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Original Signed

Arthur Pickett
Division Engineer
Industrial Waste Division

AGP-JWH:IW

County Permit Revised
May 20, 1958

See Requirement File.

Egg-1
5-2

REQ # 1951

COUNTY OF LOS ANGELES

DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION
108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

JOHN A. LAMBIE
COUNTY ENGINEER
FORD S. DODDS
CHIEF DEPUTY

ARTHUR PICKETT
DIVISION ENGINEER
JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

POLLUTION CONTROL BOARD
MAY 23 1958
LOS ANGELES

May 20, 1958

C. LARSON
MAY 22 1958

CERTIFIED MAIL

B.K.K. Company
530 West Sixth Street
Los Angeles 14, California

M G EGGETT
MAY 23 1958

Attention Mr. Ben K. Kazarian, President

Gentlemen:

B.K.K. COMPANY (I-416-20)

In order to simplify and standardize operating conditions at all licensed waste disposal facilities, the attached "Standard Conditions and Limitations for Dumps" has been prepared.

Immediately upon receipt of this letter all previous Conditions and Limitations are superseded and these new "Standard Conditions and Limitations for Dumps" will govern future operations at your site. Your comments, questions, or constructive criticism of these new Conditions will be appreciated.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Original Signed

Arthur Pickett
Division Engineer
Industrial Waste Division

AGP-JWH:IW

Enc.

Reg # 1951

BAY DISPOSAL COMPANY (I-416)
Between Main Street & Avalon Boulevard
and 190th Street & Del Amo

Ordinance 614 M.S., Permit No. 31

Conditions and Limitations:

1. That a 3 strand barb wire fence at least 6 feet in height be constructed around the property.

2. That a trained operator with the proper equipment be on duty at all times when dumping operations are in progress.

3. That strict regulations be observed to prevent the dumping of garbage and certain industrial wastes, particularly toxic chemicals, acid or caustic sludge, or similar objectionable substances.

4. Upon request of the operator, the County Engineer will approve a list of materials which may be dumped. No other materials shall be accepted.

5. Small dead animals shall be buried at once at least 3 feet below the ground surface in accordance with the requirements of the County Health Officer. No large dead animals shall be accepted.

6. That each trench before filling, be rough graded so as to provide drainage towards the proposed Dominguez Channel.

7. That each day's fill be covered with clean earth, and that the top covering of the filled area be made with at least two feet of clean earth.

8. That the operator of the dump be required to post bond of $25,000 with the Board of Supervisors to guarantee satisfactory operation.

9. That the final elevation of the filled ground be at least two feet above adjacent street grades.

10. That all wells within the dump area must be properly safeguarded, and that provisions be made for sealing such wells with concrete before abandonment.

COPY

11. That representatives of interested County departments be permitted access at any time when dumping operations are in progress to take samples and inspect the operation.

12. That dump operators post a deposit sufficient to cover the cost of periodic sampling and analysis of any suspected materials or of any liquid waste from the filled area.

13. A barricade-type fence shall be provided to prevent blowing of papers and unsightly conditions adjacent to the dumping operations.

14. The ground shall be wet down at frequent intervals to control dust.

15. In the event of rodent infestation, regulations and requirements of the Health Officer shall be immediately invoked.

16. Provisions for adequate water supply, pipe lines, hydrants and hoses to cope with possible fires created accidentally or by spontaneous combustion of buried materials shall be approved by the County Engineer.

17. That before utilization of the areas below elevation 15.5, the operators shall consult with the Chief Engineer of the County Flood Control District and cooperate in working out a program of development and channel enlargement which will not adversely affect adjacent and downstream property owners or other interests because of increased flood hazards.

18. That right of way requirements of the Flood Control District for the relocation of Dominguez Channel through the subject area be recognized and that no operations be carried on within said proposed right of way, or within existing rights of way except upon permission of the Chief Engineer of the County Flood Control District.

19. That the operators make adequate provision for the passage of all drainage waters through the subject area and protect all surface exposed to running water to prevent washing of dumped materials to downstream areas and into the Los Angeles Harbor.

20. That where possible, the operators secure material needed for covering rubbish fills, by excavation of the Dominguez Channel on its new location, and that they shall not encroach upon the existing channel with disposal operations until a new and adequate channel is completed.

kBStes
7-1-48

COPY

copied 1-31-51
cw

April 23, 1958

COPY

Mr. Wm. Tibbett
Los Angeles County Health Dept.
111 East First Street
Los Angeles 12, California

Dear Sir:

Pursuant to our telephone conversation of April 14, 1958, I am enclosing a copy of requirements prescribed by the Board for the B.K.K. Dump in Los Angeles County, our Resolution No. 58-4.

Those items listed in these requirements which differ from the normal items considered under Classes I, II, or III dumps have been considered by the Board for each and every consideration and circumstance and have not been accepted without thorough consideration of the facts involved on a case by case review.

Inert solid fill would be defined as non-water soluble, non-decomposable inert solid material. Other solid material would then be considered on a case by case basis.

Liquid or semi-liquid material not listed in Class I, II or III would be considered by the Board on a case by case basis.

If you have further questions we will be glad to answer them.

Very truly yours,

LINNE C. LARSON, Executive Officer

RMH:ef
Encl.

By _____
RAYMOND M. HERTEL,
Senior Water Pollution Control Engr.

51-2

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
APR 22 1958
LOS ANGELES

County of Los Angeles
Health Department

241 North Figueroa Street
Los Angeles 12, California April 18, 1958

Mr. John A. Lambie, County Engineer
Industrial Waste Division
619 H. W. Hellman Building
354 South Spring Street
Los Angeles 13, California

L. C. LARSON
APR 28 1958
M. G. EGGETT
APR 22 1958
J. H. HANSON
R. M. HERTEL APR 29 1958
APR 22 1958

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Subject: B.K.K. Company (I-416-20)

Pursuant to your communication of April 11, 1958, we wish to advise you that the Los Angeles County Health Department will have no objection to the acceptance of garbage by the B.K.K. Company on premises located at 19200 South Main Street in the Dominguez area of Los Angeles County, subject to the following conditions:

1. That all garbage and market refuse shall at all times be handled in such a manner as to prevent the breeding or harboring of flies or rodents.

2. That such steps as are necessary shall be taken at all times in order to prevent odors or other nuisance.

3. That all garbage and market refuse shall immediately be covered upon receipt, and at the end of the day be completely covered with clean earth sufficiently compacted to prevent the emergence of flies or infestation by rodents.

4. Final covering shall consist of no less than one foot of well compacted clean earth plus as much more as is necessary to permanently prevent the emergence of flies or infestation by rodents.

5. No salvage operations shall be permitted for the recovery of any garbage or market refuse.

Very truly yours,

ROY O. GILBERT, M. D.
Health Officer

By Henry L. Messier
Henry L. Messier, Asst. Director
Bureau of Sanitation

HLM:vr
cc: Matthew Eggett
F. R. Bowerman
W. J. Manetta
Y. Yamamoto
D. Colfelt

BOARD MEMBERS

RAY L. DERBY, CHAIRMAN
Los Angeles

C. E. ARNOLD
Los Angeles

FRED C. SNODGRASS
Ventura

GILBERT C. VAN CAMP
Terminal Island

JOHN B. WENTZ
Beverly Hills

GOODWIN J. KNIGHT
GOVERNOR

STATE OF CALIFORNIA

LINNE C. LARSON
EXECUTIVE OFFICER

OFFICE OF

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

LOS ANGELES REGION

ROOM 504, SPRING-ARCADE BUILDING
541 SOUTH SPRING STREET, LOS ANGELES 13
TEL. MA 6-1515, EXT. 2355

April 11, 1958

COPY

Mr. John A. Lambie, County Engineer
County of Los Angeles
354 So. Spring St. - Room 619
Los Angeles 13, California

Re: B.K.K. Public Dump -
L.A.Co.Industrial Waste
Permit No. 31 -
(File: 51-2)

Attn: Mr. Arthur Pickett, Div. Engineer
Industrial Waste Division

Gentlemen:

Reference is made to your letter dated January 30, 1958, addressed to the B.K.K. Company in which you are proposing to amend Industrial Waste Permit No. 31 issued to the B.K.K. Company for the operation of a waste disposal facility located at 19200 South Main Street, Los Angeles County. By means of transmitting a copy of this letter to this office, you have requested this Board's approval of these proposed amendments.

At a regular meeting held on April 10, 1958, the Board, after reviewing the proposed amendments, adopted the enclosed Resolution No. 58-4 (Prescribing Requirements for the Disposal of Wastes at a Waste Disposal Facility commonly known as the B.K.K. Public Dump in Los Angeles County).

It is respectfully requested that your Industrial Waste Permit No. 31 issued to the B.K.K. Company be amended to include the limitations and conditions specified in the enclosed Resolution.

For your convenience, there is enclosed a copy of this Resolution for transmittal to the B.K.K. Company in accordance with administrative procedures established between your office and this Board.

Very truly yours,

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

Linne C. Larson

LINNE C. LARSON
Executive Officer

LCL:ef
Encl (In duplicate)
cc: Los Angeles Co. Flood Contr. Dist. w/incl.
Los Angeles Co. Health Dept.-w/incl.
State Dept. of Water Resources,L.A. - w/incl.

REQUIREMENT NO. 1951

4-10-58

State of California
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
Los Angeles Region

RESOLUTION NO. 58-4

PRESCRIBING REQUIREMENTS FOR THE DISPOSAL OF WASTES AT A WASTE DISPOSAL FACILITY COMMONLY KNOWN AS THE B.K.K. PUBLIC DUMP IN LOS ANGELES COUNTY.

File No. 51-2

WHEREAS, a waste disposal facility, commonly known as the B.K.K. Public Dump is located at 19200 South Main Street, Los Angeles County, and is owned and operated by the B.K.K. Company, Inc., and

WHEREAS, since this waste disposal facility is located within the unincorporated area of Los Angeles County, the County Engineer on July 2, 1948, for the operation of this waste disposal facility, issued to the B.K.K. Company, Inc., Industrial Waste Permit No. 31 containing certain conditions and limitations pertaining to water pollution and nuisance; and

WHEREAS, the County Engineer on September 4, 1956, made certain modifications in Industrial Waste Permit No. 31; and

WHEREAS, the County Engineer on February 14, 1957, made further modifications in Industrial Waste Permit No. 31; and

WHEREAS, this Board at its regular meeting held on June 27, 1957, approved a request received from the County Engineer which stipulated that certain semi-liquid wastes could be disposed of in Class II Dumps if accomplished in strict compliance with conditions as outlined in the County Engineer's letter of May 24, 1957; and

WHEREAS, the Board also stipulated that disposal of such semi-liquid wastes would be considered separately after a case-by-case investigation of each Class II Disposal Site; and

WHEREAS, the County Engineer in a letter dated January 30, 1958, addressed to the B.K.K. Company is proposing to make extensive modifications to Industrial Waste Permit No. 31, and the County Engineer, by a copy of this letter transmitted to this Board is requesting the Board's approval of these amendments; and

Requirements
B.K.K. Public Dump

File: 51-2

WHEREAS, at the request of this Board, the State Department of Water Resources has submitted in their memorandum dated December 26, 1956, a geological and hydrological report on this disposal site; and

WHEREAS, the Board's staff has made an investigation of the disposal of wastes at this dump site; and

WHEREAS, based upon the above investigations and other information made available,

the Board finds that:

1. This disposal site is located in the central part of the West Coast Ground Water Basin. This ground water basin supplies more than 65,000 acre-feet of water annually for beneficial uses, including domestic, municipal, industrial, and agricultural purposes.

2. The ground water basin under the dump site consists of a series of sand and gravel layers separated vertically by relatively impermeable lenses of silt and clay. The uppermost water-bearing material is known as the semi-perched water-bearing zone, and the other water-bearing strata beneath this zone are known as the "200-foot sand", the "400-foot gravel", and the Silverado Zones.

3. At the site, the semi-perched zone is separated from the "200-foot sand" by a considerable thickness of sandy silt and clay lenses which restrict downward percolation. Limited lateral migration, however, may occur toward an area several miles to the southeast where continuity exists between the above-mentioned water-bearing zones.

4. The recorded high ground water elevation in the semi-perched zone in the vicinity of the dump site was 8.0 feet above sea level. Although similar high water levels may reoccur, five feet above sea level may be considered a reasonable maximum ground water elevation if drainage in the dump site and traversing drainage channel are adequately maintained.

5. The preservation of ground water quality for the above-mentioned beneficial uses is of great economic importance to municipalities in the West Coast Basin.

NOW, THEREFORE BE IT RESOLVED, that in order to prevent pollution of the receiving waters and to prevent creation of a nuisance, this Regional Water Pollution Control Board, in accordance with authority granted in

Requirements
B.K.K. Public Dump

File: 51-2

Division 7 of the Water Code of the State of California, prescribes the following requirements for the disposal of wastes at this waste disposal facility owned and operated by the B.K.K. Company, Inc., subject to the provisions of Section 13054 of said Water Code which reads in part that "Requirements may be reversed from time to time":

A. No wastes other than solid inert fill shall be deposited below elevation +5 feet U.S.C. and G.S. Sea Level Datum of 1929. Inert solid fill is defined as nonwater soluble, nondecomposable, inert solids of the nature below:

1. Natural earth
2. Rock, sand, and gravel
3. Paving fragments
4. Concrete
5. Brick
6. Plaster and plaster products
7. Steel mill slag
8. Glass
9. Ashestos fibre and products therefrom
~~10. Street sweepings collected by the County or municipalities during established street cleaning operations and brought to the site in the public agencies' vehicles provided said sweepings contain not less than 80% by volume of solid inert materials.~~

B. Only the following listed materials shall be deposited above an elevation of +5 feet U.S.C. and G.S. Sea Level Datum of 1929.

a. Solid material defined as ordinary household and commercial refuse and/or rubbish, garbage, other decomposable organic refuse, and scrap metal of the nature indicated below:

1. Metals and metal products except magnesum and its alloys and salts.
2. Paper and paper products including roofing and tar paper.
3. Cloth and clothing
4. Wood and wood products
5. Lanw clippings, sod and shrubbery
6. Small dead animals
7. Unquenched ashes mixed with refuse
8. Manufactured rubber products
9. Solid plastic products
10. Small quantities of noxious materials in mixed loads of rubbish.

11. Oil soaked excelsior or straw used to absorb hydrocarbon oils from waste water.
12. Dried mud cake from oil field sumps
13. Residue and grit from separation chambers from the Hyperion Sludge Plant provided that:

    (1) This material must be covered immediately.
    (2) Such steps as are necessary be taken at all times in order to prevent fly breeding or odor nuisance.

14. Street sweepings
15. All solid inert materials listed in Section A, above.

b. Semi-liquid wastes as listed below:

1. Rotary drilling mud from oil field drilling operations.
2. Cleanings from production tanks. Cleanings from production tanks are defined as the residues removed in the cleaning of tanks used solely for the production and storage of unrefined petroleum. Tank cleanings does not include any substance derived from the cleaning of tanks used in connection with oil refining, storage of oil refinery wastes or other refined petroleum products.
3. Paint sludge recovered from water circulated in paint spray booths.
4. Acetylene sludge
5. Sludge from automobile wash racks and steam cleaning plants.
6. Mud and water from laundries.
7. Liquid latex wastes.
8. Ceramic, pottery, and glaze wastes
9. Lime and soda water.

All of the above semi-liquid wastes shall be limited in quantity to 10 gallons for each cubic yard of concurrently accepted uncompacted materials as listed in above paragraph "a". Semi-liquid wastes so received shall be immediately mixed with the materials listed in the above paragraph "a" and shall be confined to such materials in such a manner as to prevent run-off or discharge to adjoining areas.

All semi-liquid wastes received shall be accounted for by adequate records kept by the operator of the dump site, including certifications

as to their character, origin, and quantity. After such certifications are endorsed by the producer of the wastes, the hauler, and the operator, they shall be filed with the office of the County Engineer once each month.

Before the end of each day's operation, all remaining semi-liquid wastes shall be thoroughly mixed with dirt and deposited on the operating face of the fill. There shall be no storage of semi-liquid wastes or liquids from these wastes by means of sumps on the site.

Trucks and all other equipment for transporting liquids or semi-liquid wastes shall be free of cesspool pumpage, chemical wastes, acid sludge or other unapproved materials; and

BE IT FURTHER RESOLVED, that adequate facilities shall be provided to divert flood or storm waters from adjacent areas around this waste disposal site, or to carry such waters across the filled areas in a manner which will permanently prevent percolation of such waters through the filled areas on this disposal site; and

BE IT FURTHER RESOLVED, that in prescribing the above requirements, it is the intent of this Board to:

1. Preserve the quality of the receiving waters, insofar as they may be affected by the wastes disposed of at this site, suitable for beneficial uses which they may be utilized.

2. Prevent the creation of a nuisance as a result of the disposal of wastes at this site; and

BE IT FURTHER RESOLVED, that the above requirements do not authorize the commission of any act resulting in injury to the property of another; and

BE IT FURTHER RESOLVED, that all Federal, State, County, and sanitary and health codes rules, regulations, laws, and ordinances pertinent to the disposal of wastes at this site shall be complied with in the operation and maintenance of this waste disposal facility; and

BE IT FURTHER RESOLVED, that all previous actions taken by this Board with respect

to the disposal of wastes at this site are hereby rescinded and superseded by the adoption of this resolution; and

BE IT FURTHER RESOLVED, that the Executive Officer of this Board be authorized, and he is hereby directed, to certify and submit copies of this resolution to the County Engineer of Los Angeles County and to such other agencies and individuals as may have need therefor, or as may request same.

I, Linne C. Larson, Executive Office of the Los Angeles Regional Water Pollution Control Board, State of California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the Los Angeles Regional Water Pollution Control Board at the Board Meeting held on April 10, 1958.

Linne C. Larson

LINNE C. LARSON
Executive Officer

LCL:ef
4-7-58

51-V

L. C. LARSON

MAR 31 1958

MEMORANDUM

TO: Mr. Harold W. Symmonds
FROM: Mr. John W. Henderson
FILE: I.W. PD STANDARDS AND LIMITATIONS
DATE: March 21, 1958

In accordance with instructions contained in Assignment No. 345 I have investigated the waste product which has been called "Silicate Catalyst" produced by Richfield Oil Corporation. It is believed that other catalytic wastes are being produced by refineries in the area. However, they were not considered in this investigation. A memorandum filed by Milo J. Dobes, on March 7, 1958, gave the results of our visit to the Richfield Oil Corporation, and a sample of the waste material was forwarded to the laboratory for analysis. Calculated soluble solids in this material was determined as 2.8%.

Mr. Graham of Richfield Oil Corporation states that Mr. Larson of the Water Pollution Control Board has told him that this material is acceptable in Class II Dumps provided it does not exceed 4000 ppm. total dissolved solids in the form presented for disposal. Based on the 4000 ppm. allowable TDS and considering all soluble material in solution, one gallon of water would be needed for each pound of dry waste. Figuring 30 pounds per cubic foot for dry material or 30 gallons of water for each cubic foot of waste, 810 gallons of water would be needed for each cubic yard of waste. The T1 and T2 fixed bed units at Richfield produce 8 cubic yards of waste per week. Proper dilution of this material would require approximately 6480 gallons of water per week. The waste from fluid bed units, at the present time, is shipped in a slurry of 50% solid waste and 50% water on a volume basis. This means that approximately 22 cubic feet of water and 22 cubic feet of waste are in each ton of slurry, or 660 pounds of waste and 1373 pounds of water. 496 gallons of water per ton additional would be required for proper dilution of this material, and approximately 4 tons of the slurry is produced from fluid bed units per day. This means that an additional amount of 1984 gallons of water per day would be needed, for proper dilution of the waste from fluid bed units.

I have discussed this matter with Mr. Graham and he says that dilution to this extent would not be economical. For this reason he is going to continue to have this material hauled to the City of Long Beach for disposal in their facilities.

We have had requests from at least 3 dumps located in County unincorporated territory requesting permission to accept this material under various names. This waste material has been called (1) Liquid Catalyst, (2) Synthetic Silicate Catalyst From The Richfield Oil Refinery, and (3) Silicate Catalyst.

None of these requests gave any true indication of what the material was. As a result of consideration of the request from Mr. Cassidy the material was discussed by the Industrial Waste Committee at its meeting held December 17, 1957, as Synthetic Silicate Catalyst. Information received at that time indicated that the material was relatively insoluble and would not constitute any hazard. At this meeting the Committee approved the acceptance of this material provided that the total dissolved solids did not exceed 2000 ppm. Since that time several permits have been modified to allow acceptance of this material. However, the amendment made no mention of the limitation on total dissolved solids.

The catalytic waste being produced by Richfield Oil Corporation is not acceptable in either its dry form or as a slurry since the soluble percentage of the dry material is sufficient to constitute a hazard, and since it is not economically feasible to mix the dry material or the slurry with sufficient water to bring the TDS to less than 7000 ppm. For this reason letters are being prepared to the operators who have requested this material, denying their request. In addition, permits which have been amended to allow acceptance of this material will be further amended denying acceptance of this material.

JWH:IW

cc: AGP, JLP, WC, TTO, JWH, MJD, LQ, FILE

File 51-21

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION
108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

JOHN A. LAMBIE
COUNTY ENGINEER
FORD S. DODDS
CHIEF DEPUTY

ARTHUR PICKETT
DIVISION ENGINEER
JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

REGIONAL WATER POLLUTION CONTROL BOARD
FEB 10 1958
LOS ANGELES

January 30, 1958

CERTIFIED MAIL

L. C. LARSON
FEB 10 1958

R. M. HERTEL
FEB 10 1958

M. G. EGGETT
FEB 10 1958

B.K.K. Company
530 West Sixth Street
Los Angeles 14, California

Attention Mr. Ben K. Kazarian, President

Gentlemen:

B.K.K. COMPANY (I-416-20)

The California Division of Water Resources has recently made a study of semi-perched ground water in the vicinity of your waste disposal facility. As a result of this study, the California Regional Water Pollution Control Board requested a reconsideration of operating conditions of all waste disposal facilities in the area. The subject was considered further by an Industrial Waste Committee, and it was determined that a specific elevation should be established, below which no Class 2 materials would be deposited.

A policy has been established which pertains to yours, and all other similar waste disposal facilities in the vicinity. The elevation of "5 feet above U.S.C.&G.S. Sea Level Datum, 1929" has been designated as the elevation below which Class 2 material cannot be deposited at your facility. In accordance with Condition No. 16 of your Industrial Waste Permit, Condition No. 4 is amended to conform with this policy. Therefore, immediately upon receipt of this notification, Condition No. 4 of your Industrial Waste Permit No. 31 is amended to read as follows:

4. Only the following materials may be deposited at the above described facility and deposition of these materials is limited as follows:

a. Only inert solid fill may be deposited below elevation 5 feet above U.S.C.& G.S. Sea Level

Datum of 1929. Inert and solid fill as defined and restricted to the following:

1. Natural earth
2. Rock, sand and gravel
3. Paving fragments
4. Concrete
5. Brick
6. Plaster and plaster products
7. Steel mill slag
8. Street sweepings
9. Glass
10. Asbestos fibre and products therefrom

b. Only the following listed solid materials may be deposited above an elevation of 5 feet above U.S.C.& G.S. Sea Level Datum of 1929:

1. Ordinary household refuse
2. All materials listed in above sub_paragraph "a".
3. Metals and metal products except magnesium and its alloys and salts
4. Dry mud cake from oil field sumps
5. Paper and paper products including roofing and tar paper
6. Cloth and clothing
7. Wood and wood products
8. Lawn clippings, sod and shrubbery
9. Cold ashes received in mixed loads of rubbish
10. Manufactured rubber products
11. Solid plastic products
12. Small quantities of noxious materials in mixed loads of rubbish
13. Oil soaked excelsior or straw used to absorb hydrocarbon oils from waste water
14. Residue and grit from separation chambers from the Hyperion Sludge Plant provided that:

    a. This material must be covered immediately

    b. Such steps as are necessary be taken at all times in order to prevent fly breeding or odor nuisance.

c. Only the following listed liquid materials may be deposited above an elevation of 5 feet above U.S.C. & G.S. Sea Level Datum of 1929.

The following liquids are limited in quantity to 10 gallons for each cubic yard of concurrently accepted uncompacted material as listed in the above paragraphs a and b. Liquids so received shall be immediately mixed with the materials listed in Paragraphs a and b and shall be confined to such materials in such a manner as to prevent any runoff or discharge to adjoining areas.

Before the end of each day's operation, all remaining liquids shall be thoroughly mixed with dirt and deposited on the operating face of the fill. There shall be no storage of liquids by means of sumps upon the described premises:

a. Rotary drilling mud
b. Cleanings from production tanks
   Cleanings from production tanks are defined as the residues removed in the cleaning of tanks used solely for the production and storage of unrefined petroleum. Tank cleaning does not include any substance derived from the cleaning of tanks used in connection with oil refining, storage of oil refinery wastes or other refined petroleum products.
c. Paint sludge recovered from water circulated in paint spray booths.
d. Acetylene sludge
e. Synthetic silicate catalyst from petroleum refining processes.
f. Sludge from automobile wash racks and steam cleaning plants.
g. Mud and water from laundries.
h. Liquid latex waste.
i. Ceramic, pottery and glaze wastes.
l. Lime and soda water.

All liquid wastes received at the above described facility shall be accounted for by adequate records kept by the permittee, including certifications as to their chemical character and origin. After such certifications are endorsed

by the producer, the hauler and the disposal facility operator, they shall be filed with the office of the County Engineer for review and record.

The above amendments are subject to approval by the Regional Water Control Board No. 4.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

ARTHUR PICKETT
Original Signed
INDUSTRIAL WASTE ENGINEER
Arthur Pickett
Division Engineer
Industrial Waste Division

AGP-JWH:HF

51-2

JOHN A. LAMBIE
COUNTY ENGINEER

FORD S. DODDS
CHIEF DEPUTY

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION

108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

ARTHUR PICKETT
DIVISION ENGINEER

JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

October 24, 1957

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
OCT 30 1957
LOS ANGELES

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
504 Spring Arcade Building
541 South Spring Street
Los Angeles 13, California

Attention Mr. Matthew Eggett

R. M. HERTEL
OCT 30 1957

Dear Sir:

APPLICATION FOR BUSINESS LICENSE RENEWAL
BKK COMPANY, (I-416)
19200 SOUTH MAIN ST., DOMINGUEZ

Section 2231 (g) of Ordinance No. 5860 (Business License Ordinance) provides that the County Engineer shall certify to the Board of Supervisors:

> "Whether any other interested officer, department, or agency has indicated that applicable ordinances or regulations can be met by the applicant".

You are requested to indicate below whether ordinances or regulations under your jurisdiction can be met by subject applicant, and return the attached copy to this office by November 14, 1957.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Arthur Pickett

Arthur Pickett, Division Engineer
Industrial Waste Division

AGP-WBB:LC
Enc.

The above applicant (can) (cannot) meet all applicable ordinances or regulations under the jurisdiction of this office.
Remarks: This Board has not reviewed all aspects of operations at this site.

Signed Linne C Larson
Executive Officer

#152-11/56

The Board has not reviewed all aspects of operations at this site

October 22, 1957

John A. Lambie, County Engineer
354 S. Spring Street - Room 619
Los Angeles 13, California

Attention: Arthur Pickett, Division Engineer

Re: BKK Dump - (Your File I-416-20) (Our File 51-2)

Dear Sir:

On July 8, 1957, this office made reference to reports of the State Department of Water Resources which had been forwarded to you on March 1, 1957, and which were concerned with various dumps in the vicinity of the Dominguez Channel. Relative to the subject dump - and one other - it was suggested by this office that conditions and limitations provided in the existing permit be reviewed by your office and the Los Angeles County Industrial Waste Committee.

At a subsequent meeting of the Industrial Waste Committee this was reviewed. It was the consensus of the committee that although past policy has been to require a two-foot margin of safety above the anticipated water high, in consideration of the extent to which dumping had already proceeded, a minimum elevation to deposit rubbish at anticipated water high would be reasonable.

It is the opion of the Executive Officer that amending the existing permit to accept materials as set forth in its list for Class II Dumps, in Board Resolution No. 55-1, at elevations above +5 feet USGS and subject also to the further provisos of that resolution, will meet the requirements of this Regional Board. However, in accordance with paragraph (e) of the Administrative Procedures, limitations and conditions pertaining to water pollution and nuisance will still require official action by the Board.

Pursuant to paragraph (f) of the Procedures, it is respectfully requested that a copy of the permit issued to the subject company, with its conditions and limitations, be forwarded to this office.

Very truly yours,

LINNE C. LARSON, Executive Officer

By
MATTHEW G. EGGETT, Asst. Executive Officer

MGE:V

July 8, 1957

John A. Lembie, County Engineer
354 South Spring Street - Rm. 619
Los Angeles 13, California

Attention: Mr. A. Pickett, Division Engineer

Re: BKK Dump - File 51-2
Martin Adams Dump - File 53-154

Dear Sir:

On March 1, 1957, relative to the subject dumps, as well as others of the vicinity, copies of the State Department of Water Resour ces reports were forwarded to you.

It is noted that in the instances of both the BKK Dump and the 213th Street Dump conditions of existing permits do not preclude the depositing of decomposible substances at elevations below the anticipated high groundwater.

As it would appear desirable to protect the semi-perched zone and subsequently the 200 foot sands it is respectfully suggested that conditions and limitations provided in existing permits for the subject dumps be reviewed by your office and by the Los Angeles County Industrial Waste Committee in light of the recently available data.

Very truly yours,

LINNE C. LARSON
Executive Officer

MGE:V

Note: FCD verbally advised that max hi is +7'.

u. Solid mud cake
v. Paint sludge recovered from water circulated paint spray booths
w. Oil soaked excelsior or straw used to absorb hydrocarbon oils from waste water.

5. The final elevation of the filled area shall not exceed 22 feet U.S.C. & G.S. Sea Level Datum of 1929.

6. No garbage or market refuse shall be accepted for disposal at this site.

7. Other waste materials may be accepted if written approval is first obtained from the County Engineer.

8. Wastes either liquid or solid which contain toxic or highly pollutionable materials shall not be accepted for disposal at this location.

9. Fencing, access roads, and all details of the site preparation shall be completed and maintained as shown on said approved engineering plans and specifications. Fencing and appurtenances as described by Ordinance No. 5307 and its amendments shall be installed and maintained in good condition at all times entirely surrounding all dumping and salvage operations.

10. The operator shall make every reasonable effort to prevent and eliminate any public nuisance created by dust, odors, or blowing of papers.

11. The permittee shall construct and maintain survey monuments and bench marks as shown on said approved plans or as the County Engineer may require for reference and control of operations as the work progresses.

12. The permittee shall advise the County Engineer in writing as to the name, address, and telephone number of authorized persons who are to be placed in responsible charge of operations. One such authorized person shall be on duty at all times when dumping operations are in progress. At all other times, gates shall be closed and securely locked and no access to the property permitted.

13. The bond required by Section 2222 of Ordinance No. 5860 (Business License Ordinance) shall be kept in continuous effect until the project is terminated to the satisfaction of the County Engineer. The principal named on said bond shall at all times be the same person as permittee mentioned in this permit. The bond and any amendments thereto shall be furnished to the Board of Supervisors and a copy thereof furnished the County Engineer.

MR. EGGETT

51-2

L.C.
M.G.
R.J.
F.J.

STAFF
Return To
File

County of Los Angeles
Health Department
241 North Figueroa Street
Los Angeles 12, California

May 23, 1957

BOARD NO. 4 MAY 27 1957 LOS ANGELES

R. M. HERTEL

MAY 29 1957

L. C. LARSON
MAY 2[illegible] 1957
M. G. EGGETT
MAY 2[illegible] 1957

Mr. John A. Lambie, County Engineer
108 West Second St.
Los Angeles, California

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Subject: B.K.K. Company (I-416-20)
Zone Exception Case No. 2410

With reference to your communication of May 17, 1957, we wish to advise you that the Los Angeles County Health Department will have no objection to the issuance of a permit to the B.K.K. Company in order to permit the acceptance and disposal of garbage and market refuse at their facility located at 19200 South Main Street in the Dominguez Area of Los Angeles County, subject to the following conditions:

1. That all garbage and market refuse shall at all times be handled in such a manner as to prevent the breeding or harboring of flies or rodents.

2. That such steps as are necessary shall be taken at all times in order to prevent odors or other nuisance.

3. That all garbage and market refuse shall immediately be covered upon receipt, and at the end of the day be completely covered with clean earth sufficiently compacted to prevent the emergence of flies or infestation by rodents.

4. Final covering shall consist of no less than one foot of well compacted clean earth plus as much more as is necessary to permanently prevent the emergence of flies or infestation by rodents.

5. No salvage operations shall be permitted for the recovery of any garbage or market refuse.

Tests that have been conducted by the State Department of Public Health have indicated that the degree of compaction of cover material at dump sites, particularly those accepting garbage and market refuse, is an extremely important factor in preventing the emergence of adult flies from

infested material. Compaction is likewise an important factor in the prevention and control of rodent harborage, and it is therefore our suggestion that this phase of the operation be closely observed in order to determine the proper operational procedures to be employed.

Very truly yours,

ROY O. GILBERT, M. D.
Health Officer

By Henry L. Nessler
Henry L. Nessler, Asst. Director
Bureau of Sanitation

HLM:vr
cc: Matthew Eggett,
Reg. Water Pollution Control Bd. #4
F. R. Bowerman,
L.A. County Sanitation Dist.
W. J. Manetta,
L.A. County Flood Control Dist.
Y. Yamamoto
D. Colfelt

Mr. Eggett

M.G.E. ____
C. B. J. ____
F. E. J. ____

JOHN A. LAMBIE
COUNTY ENGINEER
FORD S. DODDS
CHIEF DEPUTY

STAFF ____
Return To ____
File ____

COUNTY OF LOS ANGELES

DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION
108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

REGIONAL WATER POLLUTION CONTROL BOARD
FEB 18 1957
ARTHUR PICKETT
DIVISION ENGINEER
JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

February 14, 1957

CERTIFIED

RETURN RECEIPT REQUESTED

B.K.K. Company
530 West Sixth Street
Los Angeles 14, California

Attention Mr. Ben K. Kazarian, President

Gentlemen:

B.K.K. COMPANY (I-416-20)

You are hereby notified that immediately upon receipt of this notification, Condition No. 4 of your Industrial Waste Permit No. 31 is amended to include the following:

x. Residue and grit from separation chambers from the Hyperion Sludge Plant disposed of as follows:

1. That this material must be covered immediately.

2. That such steps as are necessary be taken at all times in order to prevent fly breeding or odor nuisance.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Arthur Pickett

Arthur Pickett
Division Engineer
Industrial Waste Division

AGP-MJD:LC

C. G. L. ✓
M. G. E. ✓
C. B. J. _____
R. E. L. _____
_____
_____
_____
_____
_____
STAFF _____
Return To _____
File _____

County of Los Angeles
Health Department
241 North Figueroa Street
Los Angeles 12, California

51-2

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4 LOS ANGELES FEB 8 1957

February 5, 1957

M. G. EGGETT
FEB 14 1957

L. C. LARSON
FEB 8 1956

John Lambie, County Engineer
108 West Second Street
Los Angeles, California

Attention: Mr. Arthur Pickett, Division Engineer,
Industrial Waste Division

Dear Sir:

Subject: B.K.K. Disposal, 197th and Main Streets, Dominguez.

With reference to your recent communication, we wish to advise you that the Los Angeles County Health Department will have no objection to the modification of the existing industrial waste permit in order that the B.K.K. Company will be able to accept for disposal grit material from the Hyperion Sewage Disposal Plant, on their premises at 197th and Main Streets in the Dominguez Area of Los Angeles County, provided as follows:

1. That such material be covered immediately.

2. That such steps as are necessary be taken at all times in order to prevent fly breeding or odor nuisance.

Very truly yours,

ROY O. GILBERT, M. D.
Health Officer

By Henry L. Messier
Henry L. Messier, Asst. Director
Bureau of Sanitation

HLM:vr
cc: Mr. Matthew Eggett,
Reg. Water Pollution Control Bd.
Mr. W. J. Manetta,
County Flood Control Dist.
Mr. P. R. Bowerman,
County Sanitation Dist.
Mr. Yoneo Yamamoto
Mr. D. Colfelt

L.C.L. /
M.G.E. /
C.B.J.
C.E.J.

STAFF
Return To
File

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

OFFICE OF CHIEF ENGINEER

MAILING ADDRESS:
BOX 2418
TERMINAL ANNEX
LOS ANGELES 54, CALIFORNIA

2250 ALCAZAR STREET
LOS ANGELES
CAPITOL 2-6151

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
LOS ANGELES
FEB 4 1957

January 31, 1957

2-3
Administration
Industrial Waste Permit
B.K.K. Company

Your File: I-416-20

M. G. EGGETT
FEB 4 1957

L. C. LARSON
FEB 4 1956

Mr. John A. Lambie
County Engineer
725 Los Angeles County Engineering Building
108 West Second Street
Los Angeles 12, California

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Reference is made to your letter of January 7, 1957 notifying this office of an application filed by the B.K.K. Company requesting that their Industrial Waste Permit No. 31 be amended to allow the acceptance of residue from the Hyperion Sludge Plant.

No adverse affects on the ground water are anticipated by approval of this request. It is presumed, however, that the County Health Department will stipulate such conditions and restrictions as may be required to insure that no nuisance or objectionable conditions are permitted to develop as a result of the proposed operation.

Yours very truly,

H. E. Hedger, Chief Engineer

By
W. J. Manetta
Division Engineer, Project Planning

cc: Mr. Linne C. Larson, Executive Officer ✓
Regional Water Pollution Control Board No. 4
Attention: Mr. Matthew Eggett

Dr. Roy O. Gilbert, County Health Officer
Attention: Mr. Loring Messier

John A. Lambie, County Engineer

1-23-57
51-2

The Los Angeles County Industrial Waste Committee has formulated the condition which includes among materials acceptable at this site:

Washed residue from grit chamber from Hyperion Sewage Treatment Plant.

Very truly yours,

LINNE C. LARSON, Executive Officer

By_____
Matthew G. Eggett
Asst. Executive Officer

MGE:mh

January 23, 1957

Mr. John A. Lambie, County Engineer
County of Los Angeles
108 West Second Street
Los Angeles 12, California

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

SUBJECT: Los Angeles County Industrial Waste Permit Application

Applicant: B.K.K. Company

Operations Address: 192nd and Main Street

Your File No. I-416-20 Our File No. 51-2

Reference is made to copy made available to this office for application for industrial waste permit filed with the County Engineer. In accordance with procedures established for the handling of industrial waste permits between your office and this Board a representative of this office met with the Los Angeles County Industrial Waste Committee to review the application of the subject company and to formulate conditions and limitations.

It is the opinion of the Executive Officer that a permit subject to the following limitations and conditions will meet the requirements of this Regional Board. However, in accordance with Paragraph (e) of the Administrative procedures, limitations and conditions pertaining to water pollution and nuisance will still require official action by the Board.

Pursuant to Paragraph (f) of the Procedures, it is respectfully requested that a copy of the permit issued to the subject company with its conditions and limitations be forwarded to this office.

L. C. L. ✓
M.G.E. ✓
C. B. J.
F. F. J.
STAFF
Return To
File

51-2

County of Los Angeles
Health Department
241 North Figueroa Street
Los Angeles 12, California

January 14, 1957

REGIONAL WATER POLLUTION CONTROL BOARD
JAN 16 1957
LOS ANGELES

L. C. LARSON
JAN 1 6 1957

Mr. John Lambie, County Engineer
108 West Second St.
Los Angeles, California

M. G. EGGETT
JAN 1 7 1957

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Subject: B.K.K. Company (I-416-20)

With reference to your communication of January 7, 1957, it is the recommendation of the Los Angeles County Health Department that amendment of Industrial Waste Permit No. 31 be withheld pending a thorough study of the situation.

As you are aware, the applicant is requesting permission to accept residue from the Hyperion Sewage Treatment Plant.

Very truly yours,

ROY O. GILBERT, M. D.
Health Officer

By Henry L. Messier
Henry L. Messier, Asst. Director
Bureau of Sanitation

HLM:vr
cc: Matthew Eggett,
Reg. Water Pollution Control Bd.
F. E. Bowerman,
Sanitation Districts
W. J. Manetta,
Flood Control District
Y. Yamamoto
David Colfelt

R. M. HERTEL
JAN 1 6 1957

L.C.L.
M.G.E.
C. B. J.
F. E.
W.
L.

STAFF
Return To
File

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION
108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

JOHN A. LAMBIE
COUNTY ENGINEER

FORD S. DODDS
CHIEF DEPUTY

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
LOS ANGELES
JAN 8 1957
ARTHUR PICKETT
DIVISION ENGINEER
JOHN S. PARTIN
ASSISTANT DIVISION ENGINEER

51-2

January 7, 1957

M. G. EGGETT
JAN 10 1957

L. C. LARSON
JAN 8 1956

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
504 Spring Arcade Building
541 South Spring Street
Los Angeles 13, California

Attention Mr. Matthew Eggett

Dear Sir:

B.K.K. COMPANY (I-416-20)

Enclosed is a copy of a letter from the B.K.K. Company requesting that their Industrial Waste Permit No. 31 be amended to allow the acceptance of residue from the Hyperion Sludge Plant. In accordance with requirements of Sections 6207 and 6208 of Ordinance No. 6130, your recommendations are requested in the matter of processing the attached request for amendment to an industrial waste permit.

In accordance with the procedure established between our offices in the matter of processing applications for industrial waste permits, it is requested that you contact all State agencies which, in your opinion, may be concerned with the proposed operations described in the attached request.

This request will be discussed at the next Industrial Waste Committee Meeting tentatively set for January 8, 1957.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Arthur Pickett

Arthur Pickett, Division Engineer
Industrial Waste Division

AGP-MJD:LC
Enc. 1

as to their character, origin, and quantity. After such certifications are endorsed by the producer of the wastes, the hauler, and the operator, they shall be filed with the office of the County Engineer once each month.

Before the end of each day's operation, all remaining semi-liquid wastes shall be thoroughly mixed with dirt and deposited on the operating face of the fill. There shall be no storage of semi-liquid wastes or liquids from these wastes by means of sumps on the site.

Trucks and all other equipment for transporting liquids or semi-liquid wastes shall be free of cesspool pumpage, chemical wastes, acid sludge or other unapproved materials; and

BE IT FURTHER RESOLVED, that adequate facilities shall be provided to divert flood or storm waters from adjacent areas around this waste disposal site, or to carry such waters across the filled areas in a manner which will permanently prevent percolation of such waters through the filled areas on this disposal site; and

BE IT FURTHER RESOLVED, that in prescribing the above requirements, it is the intent of this Board to:

1. Preserve the quality of the receiving waters, insofar as they may be affected by the wastes disposed of at this site, suitable for beneficial uses which they may be utilized.

2. Prevent the creation of a nuisance as a result of the disposal of wastes at this site; and

BE IT FURTHER RESOLVED, that the above requirements do not authorize the commission of any act resulting in injury to the property of another; and

BE IT FURTHER RESOLVED, that all Federal, State, County, and sanitary and health codes rules, regulations, laws, and ordinances pertinent to the disposal of wastes at this site shall be complied with in the operation and maintenance of this waste disposal facility; and

BE IT FURTHER RESOLVED, that all previous actions taken by this Board with respect

to the disposal of wastes at this site are hereby rescinded and superseded by the adoption of this resolution; and

BE IT FURTHER RESOLVED, that the Executive Officer of this Board be authorized, and he is hereby directed, to certify and submit copies of this resolution to the County Engineer of Los Angeles County and to such other agencies and individuals as may have need therefor, or as may request same.

I, Linne C. Larson, Executive Office of the Los Angeles Regional Water Pollution Control Board, State of California, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the Los Angeles Regional Water Pollution Control Board at the Board Meeting held on April 10, 1958.

LINNE C. LARSON
Executive Officer

LCL:ef
4-7-58

C
O
P
Y

December 27, 1956

Los Angeles County Engineer
Attention: Mr. Arthur Pickett
Industrial Waste Division
108 W. 2nd Street
Los Angeles 12, California

Dear Mr. Pickett

As you know, we have been accepting residue from the Hyperiom Sludge Plant for disposal at our 192nd & Main Street location for approximately seven years.

Inspector Thompson has suggested that we request our permit be modified to specifically include this material as acceptable for disposal.

Please consider this letter as our request that permit be modified to include permission to accept this material for disposal.

Your attention will be most appreciated

Very truly yours,

B. K. K. CO.

Ben K. Kazarian, Jr. (Signed)
Secretary-Treasurer

BKK:dh

JOHN A. LAMBIE
COUNTY ENGINEER

FORD S. DODDS
CHIEF DEPUTY

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION

108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

ARTHUR PICKETT
DIVISION ENGINEER
JOHN E. PARTIN
ASSISTANT DIVISION ENGINEER

REGIONAL WATER POLLUTION CONTROL BOARD
DEC 21 1956

51-2

December 19, 1956

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
504 Spring Arcade Building
541 South Spring Street
Los Angeles 13, California

M. G. EGGETT
DEC 21 1956

Attention Mr. Matthew Eggett

Dear Sir:

APPLICATION FOR BUSINESS LICENSE RENEWAL
B.K.K. COMPANY (I-416-20)
19200 SOUTH MAIN STREET, DOMINGUEZ

Section 2231 (g) of Ordinance No. 5860 (Business License Ordinance) provides that the County Engineer shall certify to the Board of Supervisors:

> "Whether any other interested officer, department, or agency has indicated that applicable ordinances or regulations can be met by the applicant".

You are requested to indicate below whether ordinances or regulations under your jurisdiction can be met by subject applicant, and return the attached copy to this office by December 26, 1956

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Arthur Pickett

Arthur Pickett, Division Engineer
Industrial Waste Division

AGP-WBB:LC
Enc.

The above applicant (can) (cannot) meet all applicable ordinances or regulations under the jurisdiction of this office.
Remarks: This Board has not reviewed all aspects of the operations at this site.

Signed Linne C. Larson
LINNE C. LARSON
Executive Officer

152-11/56

MGE:mh

Exc. Eggett

L. C. L. ✓
M. G. E. ✓
C. B. J. _____
F. E. _____
W. F. _____
L. T. _____

STAFF ✓
Return To CERTIFIED
File _____

COUNTY OF LOS ANGELES

DEPARTMENT OF COUNTY ENGINEER
INDUSTRIAL WASTE DIVISION
108 WEST SECOND STREET
LOS ANGELES 12, CALIFORNIA
MADISON 9-4747

JOHN A. LAMBIE
COUNTY ENGINEER

FORD S. DODDS
CHIEF DEPUTY

ARTHUR PICKETT
DIVISION ENGINEER

JOHN L. PARTIN
ASSISTANT DIVISION ENGINEER

REGIONAL WATER POLLUTION CONTROL BOARD
LOS ANGELES
SEP 5 1956

September 4, 1956

L. C. LARSON
SEP 4 1956

R. M. HERTEL
NOV 27 1956

M. G. EGGETT
SEP 6 - 1956

RETURN RECEIPT REQUESTED

B.K.K. Company
530 West Sixth Street
Los Angeles 14, California

Attention Mr. Ben K. Kazarian, President

Gentlemen:

B.K.K. COMPANY (I-416-20)

It has been necessary to amend the conditions and limitations of your Industrial Waste Permit No. 31 in order to include Zone Exception Case No. 2352 and Zone Exception Case No. 2410 under the provisions of the permit. Also, certain changes have been made in the permit conditions so that they might conform to present standards.

Therefore, immediately upon your receipt of this notification, the attached conditions and limitations will become effective and will supersede all former restrictions and provisions as may have been imposed.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

John L. Partin

John L. Partin
Assistant Division Engineer
Industrial Waste Division

JLP-JKB:LC
Enc. 1

AMENDED SPECIAL CONDITIONS AND LIMITATIONS FOR
INDUSTRIAL WASTE PERMIT NO. 31 ISSUED TO
B.K.K. COMPANY, INC.
530 WEST SIXTH STREET
LOS ANGELES 14, CALIFORNIA

A. GENERAL CONDITIONS AND LIMITATIONS

1. This permit is issued to the B.K.K. Company, Inc., for the purpose of operating a waste disposal facility at 19200 South Main Street in the Dominguez Area upon approximately 348 acres of land zoned for such use by Special Permit Case No. 537, Zone Exception Case No. 2352, and Zone Exception Case No. 2410.

2. All operations shall be conducted in strict compliance with all conditions of this permit and violation of any of these conditions shall be sufficient cause for suspension or revocation of the permit.

3. All operations shall be conducted in accordance with engineering plans and specifications approved by the County Engineer on February 2, 1956, which are hereby made a part of this permit. Operations shall be confined to the areas designated on said plans. A copy of said plans and specifications together with a copy of the conditions and limitations of this permit shall be maintained on the premises at all times for reference use of all interested persons.

4. Wastes accepted for disposal are limited to:

a. Natural earth
b. Rock, sand, and gravel
c. Paving fragments
d. Concrete
e. Brick
f. Plaster and plaster products
g. Steel mill slag
h. Mud cake from oil field sumps
i. Street sweepings
j. Glass
k. Asbestos fibre and products therefrom
l. Metals and metal products except magnesium and its alloys and salts
m. Paper and paper products including roofing and tar paper
n. Cloth and clothing
o. Wood and wood products
p. Lawn clippings, sod and shrubbery
q. Cold ashes
r. Manufactured rubber products
s. Solid plastic products
t. Small quantities of noxious materials in mixed loads of rubbish.

14. Permittee shall at all times possess an unrevoked business license issued in accordance with Ordinance No. 5860 (Business License Ordinance) while operations are being conducted under this permit. Said business license shall be promptly renewed and any delinquency in this respect shall constitute sufficient grounds for immediate suspension of this permit.

15. Representatives of interested governmental agencies shall be permitted access to the disposal site at any reasonable time for the purpose of obtaining information or of inspecting disposal operations.

16. From time to time as conditions demand, these requirements may be changed by the County Engineer upon written notification to the permittee forwarded by registered mail to last address given.

17. It is hereby declared to be the intent that if any conditions or limitations of this permit are held to be invalid, this shall not invalidate the remaining conditions and limitations of said permit.

18. Violation by the permittee, his agent, or employee, of any applicable law, ordinance, or regulation governing any phase of the operations described herein shall be considered sufficient cause for suspension of this permit.

19. All operations under this permit shall terminate on or before December 31, 1966, and prior thereto, the permittee shall have accomplished and fulfilled all of the requirements and conditions of this permit and the approved plans and specifications. No prejudice shall be created toward a request to extend this permit if such request is made prior to June 30, 1966.

B. SANITATION AND HEALTH REQUIREMENTS

20. All buildings shall be constructed and maintained in such a manner as to prevent rodent harborage.

21. Any rodent infestation shall be immediately controlled by the proper use of poison, traps or gas to the satisfaction of the County Health Officer.

22. An approved sanitary drinking water supply shall be provided and maintained on the premises.

23. Toilet facilities shall be provided and properly maintained as required by the Health Department for use of employees and all other persons who have business on the premises.

C. FIRE PREVENTION AND AIR POLLUTION REQUIREMENTS

24. Water supply system for fire fighting and other purposes shall be constructed as shown on approved plans and maintained and operated to the entire satisfaction of the County Fire Department.

25. The operator shall immediately construct and maintain a firebreak around the perimeter of the dumping operations if in the opinion of the County Engineer or the Fire Warden it is considered necessary.

26. Ground shall be maintained free of flammable material for a distance of 15 feet on each side of the access road.

27. No burning of any kind shall be permitted in connection with disposal operations at this site. Any fire which may occur on the premises or any underground smoldering shall be immediately reported to the Fire Department and to the County Engineer by the person in responsible charge of operations. In addition, it shall be the responsibility of the permittee to immediately extinguish any such fire or underground smoldering to the satisfaction of the Fire Department and the County Engineer.

D. FLOOD CONTROL REQUIREMENTS

28. The right-of-way requirements of the Los Angeles County Flood Control District for the relocation of the Dominguez Channel through the subject area shall be recognized and no operations shall be carried on within said proposed right-of-way or within existing right-of-way except with the permission of the Chief Engineer of the District. No material of any kind shall be deposited on a strip of land 50 feet wide lying on the easterly side of the flag line north from the Dominguez Channel as shown on plans dated December, 1950, prepared by Jones and Gilbert, Civil Engineers. Drainage facilities shall be provided in accordance with said approved plans.

E. OPERATING CONDITIONS

29. Adequate provision shall be made to intercept storm runoff from areas adjacent to this property and to divert such runoff in a manner which will prevent its percolation through the deposited material and/or prevent erosion thereof.

30. Equipment to be used in this operation shall comply with all ordinances, laws, and regulations pertaining to safety and licensing.

31. Sufficient equipment in good operating condition shall be available on the premises at all times to properly conduct operations in accordance with conditions of this permit.

32. All deposited material shall be thoroughly compacted so as to reduce voids to a minimum and shall be promptly and uniformly mixed with earth, sand, gravel, decomposed granite, or other approved material in a ratio of not less than one part of such material to four parts of compacted refuse measured by volume.

33. At the end of each operating day, the compacted mixture shall be covered with sufficient approved cover material to prevent odors, blowing of papers, or public nuisance, and after compaction the resulting fill shall not be disturbed.

34. Salvable materials may be separated from accepted refuse provided:

a. That such materials are loaded directly onto a vehicle for transportation to a designated storage area.
b. That the storage area be screened to the approval of the County Engineer.
c. That said vehicle be confined each night to said storage area.

35. An earth embankment not less than 8 feet above the final elevation of the fill operation shall be maintained on the periphery of the site adjacent to existing improved streets. Said embankment shall be removed at the completion of the filling operations.

36. Final covering of deposited material shall be made with not less than 2 feet of compacted uncontaminated natural earth or other approved cover material.

37. This waste disposal facility shall be maintained for the benefit of the general public, and while open to the public, the operator shall not refuse to accept materials from anyone provided the materials can be accepted for disposal under the terms of this permit and the party disposing of the material pays the regulation disposal charge.

38. A sign approved by the County Engineer shall be posted at every entrance to this facility. This sign shall contain the following information and shall be so delineated in contrasting colors as to be read without difficulty by a person with normal vision at a distance of 100 feet:

a. Name of facility
b. Schedule of days and hours when the facility will be open to the public as established by certification attached to said business license
c. Schedule of prices as also established by said certification attached to the business license
d. Any other information considered essential or pertinent by the permittee and/or the County Engineer.

39. Accepted approved liquids shall be mixed at once with materials stipulated in Conditions No. 4 and No. 7 of this permit insofar as it is practical to do and all excess or drainoff shall be confined to within 20 feet of the toe of deposited materials.

40. All liquid wastes accepted for disposal shall be reported to the County Engineer monthly upon forms supplied for such purpose.

41. This facility must remain open and serve the general public in accordance with hours and days as posted on signs at each entrance. The facility may remain open to the general public in addition to said posted hours and days but during any and all times the facility is open to the public, all of the conditions of this permit shall apply.

HWS:LC
9/4/56

Eggett.
2-2-1956

STANDARD CONDITIONS AND LIMITATIONS FOR DUMPS

1.00 GENERAL CONDITIONS AND LIMITATIONS OF I.W. PERMIT NO. 31

1.01 Basic Objectives:

It is hereby declared that the basic objective of these conditions is to achieve efficient and economical operation of waste disposal facilities in a manner which will reclaim land for beneficial use and avoid the creation of public nuisance, water pollution or health hazard. Accordingly, these standard conditions are intended to govern the type of materials accepted and the methods of operation to be followed at Class III (Inert Solid Fill) and Class II (Solid Fill, and Rubbish and Refuse) Disposal Facilities. Special conditions and limitations will be added if, in the opinion of the County Engineer, they are considered necessary to cover the acceptance of special materials, or to cope with unusual problems created by topography, geology, hydrology or other circumstances affecting an individual site.

1.10 This permit is issued to: (Name of Company)

B.K.K. Company, Inc.

2. (d.b.a.) **Same**

3. (Address of Site) **19200 South Main Street**

for operation of a Class **II**

waste disposal facility.

1.15 Operating plans approved by the Los Angeles County Engineer February 2, 1956 (Date) are hereby made a part of this permit.

1.20 Waste disposal operations shall not be allowed to extend beyond the area or areas designated on the approved plans.

1.25 This permit may be suspended or revoked for violation of any of the Conditions or Limitations thereof or for violation of any applicable statute, ordinance or legal regulation of any government agency.

1.30 The permittee shall advise the County Engineer in writing as to the name, address and telephone number of authorized persons who are to be placed in responsible charge of operations. One such authorized person shall be on duty at all times when dumping operations are in progress. At all other times gates shall be closed and securely locked and no access to the property permitted.

1.35 The bond required by Section 2222 of Ordinance No. 5860 (Business License Ordinance) shall be kept in continuous effect until the project is terminated to the satisfaction of the County Engineer. The principal named on said bond shall at all times be the same person as permittee mentioned in this permit.

1.36 The required bond and a copy thereof including all amendments thereto shall be delivered to the County Engineer. After examination and required approvals have been obtained, the County Engineer will transmit the bond to the Board of Supervisors for its acceptance.

1.40 Permittee shall at all times possess an unrevoked

business license issued in accordance with Ordinance No. 5860 (Business License Ordinance) while operations are being conducted under this permit.

1.45 Representatives of interested governmental agencies shall be permitted access to the disposal site at any reasonable time for the purpose of obtaining information or of inspecting operations.

1.50 From time to time, as conditions demand, these requirements may be changed by the County Engineer upon written notification to the permittee, forwarded by registered mail to the last address given.

1.55 It is hereby declared to be the intent that if any conditions or limitations of this permit are held to be invalid, this shall not invalidate the remaining conditions and limitations of the permit.

1.60 No Condition of this Permit shall be interpreted as permitting or requiring any violation of law, or any lawful rules, regulations or orders of any authorized agency.

2.000 MATERIALS ACCEPTABLE FOR DISPOSAL

2.100 Inert solid fill is acceptable for disposal at Class III Disposal Sites. Inert solid fill is defined as non-water soluble, nondecomposable inert solids of the nature indicated below:

2.101 Natural earth
2.102 Rock, sand and gravel
2.103 Paving fragments
2.104 Concrete
2.105 Brick

2.106 Plaster and plaster products
2.107 Steel mill slag
2.108 Glass
2.109 Asbestos Fibre and Products therefrom
2.110
2.111
2.112
2.113

2.200 Solid material defined as ordinary household and commercial refuse is acceptable at Class II Disposal Sites only. This includes decomposable organic refuse and scrap metal of the nature indicated below:

2.201 All materials listed in Items numbered 2.101 to 2.199 inclusive
2.202 Street sweepings
2.203 Small quantities of noxious materials in mixed loads of rubbish
2.204 Metals and metal products except magnesium and its alloys and salts
2.205 Paper and paper products including roofing and tar paper
2.206 Cloth and clothing
2.207 Wood and wood products
2.208 Lawn clippings, sod and shrubbery
2.209 Cold ashes received in mixed loads of rubbish
2.210 Manufactured rubber products
2.211 Solid plastic products
2.212 Dry mud cake from oil field sumps
2.213 Paint sludge received from water circulated paint spray booths not transported in vacuum tanks
2.214 Oil soaked excelsior or straw used to absorb
2.215 hydrocarbon oils from waste water.
~~2.216~~ Residue and grit from separation chambers from
~~2.217~~ the Hyperion Sludge Plant provided that:
~~2.218~~ a. This material must be covered immediately.
~~2.219~~ b. Such steps as are necessary be taken at
~~2.220~~ all times in order to prevent fly
~~2.221~~ breeding or odor nuisance.

~~xxxxxx~~

2.216 Small dead animals

2.300 GARBAGE AND MARKET REFUSE - This section is applicable only if garbage is listed in Items numbered 2.200 to 2.299 inclusive.

2.301 In this permit garbage shall mean: All discarded food, animal offal, or fruit and vegetable waste resulting from the preparation of food, or any manufactured products therefrom, including waste or cleanings from chickens or other animals, fish or other sea food, that shall have been prepared for or intended to be used as food: small dead animals; hair, hides and bones.

2.302 In this permit market refuse shall mean: Waste vegetables or fruit, or the cuttings, trimmings, residue, or scraps therefrom that have resulted from the preparation of vegetables or fruit in markets or fruit or vegetable packing houses for public sale in markets.

2.303 The acceptance of garbage and market refuse at this site will be limited as follows:

Limited amounts of garbage may be received when mixed with refuse provided that no load shall contain more than five percent (5%) garbage by volume and two per cent (2%) garbage by weight.

2.400 LIQUIDS AND SEMI-LIQUIDS ACCEPTABLE AT CLASS I AND CLASS II SITES ONLY.

2.401 Rotary drilling mud from oil field drilling operations

2.402 Cleanings from production tanks. Cleanings from production tanks are defined as the residues removed in the cleaning of tanks used solely for the production and storage of unrefined petroleum.

Tank cleanings do not include any substance derived from the cleaning of tanks used in connection with oil refinery wastes or other refined petroleum products.

2.403 Acetylene sludge
2.404 Sludge from automobile wash racks and steam cleaning products
2.405 Mud and water from laundries
2.406 Liquid latex waste
2.407 Ceramic, pottery and glaze wastes
2.408 Lime and soda water
2.409 Water containing not more than 0.5% molasses
2.410 Paint sludge recovered from water circulated in paint spray booths
2.411
2.412
2.413
2.414
2.415

3.000 HANDLING OF ACCEPTABLE MATERIALS

3.100 Inert solid fill. The following Items numbered 3.101 to 3.199 inclusive, are applicable to inert solid fill as defined under Items numbered 2.100 to 2.199 inclusive.

3.101 Inert solid fill may be deposited at any location within the dumping area, as shown on the approved plan, but shall not be used for final cover unless approved by the County Engineer.

3.200 Rubbish and Refuse. The following Items numbered 3.201 to 3.299 inclusive, are applicable to rubbish and refuse as defined in Items numbered 2.200 to 2.299 inclusive.

3.201 Rubbish and refuse may be deposited between elevation plus 5 feet U.S.C.&G.S. Sea Level Datum of 1929 and two feet below finish grade, as shown on plans approved by the County Engineer.

3.202 Rubbish and refuse shall be promptly and uniformly mixed with earth, sand, gravel, decomposed granite or other approved material in a ratio of not less than one part of such material to four parts of compacted refuse measured by volume and shall be thoroughly compacted with sufficient water or acceptable liquids so as to reduce voids to a minimum; or rubbish may be thoroughly compacted with sufficient water or acceptable liquids in layers not to exceed three feet in thickness and covered with an amount of acceptable cover material equivalent to one fourth the volume of the layer of rubbish being covered.

3.300 Garbage and Market Refuse. The following Items numbered 3.301 to 3.399 inclusive are applicable to Garbage and Market Refuse as listed in Items numbered 2.300 to 2.399 inclusive.

3.301 Items numbered 3.200 to 3.299 inclusive, shall also apply to the disposal of Garbage and Market Refuse.

3.302 Garbage and market refuse shall at all times be handled in such a manner as to prevent the breeding or harboring of flies or rodents.

3.303 Such steps as are necessary shall be taken at all times to prevent odors and other nuisance.

3.304 All garbage and market refuse shall be promptly covered upon receipt and at the end of the day be completely covered with acceptable material sufficiently compacted to prevent the emergence of flies or infestation by rodents.

3.305 Final covering shall consist of no less than two feet of well compacted clean earth plus as much more as is necessary to permanently prevent the emergence of flies or infestation by rodents.

3.306 No salvage operations shall be permitted for the recovery of any garbage or market refuse.

3.400 Liquid and Semi-Liquid Wastes. The following Items numbered 3.401 to 3.499 inclusive, are applicable to liquids and semi-liquids listed under Items numbered 2.400 to 2.499 inclusive.

3.401 Liquids and semi-liquids shall be immediately mixed with rubbish and refuse as listed under Items numbered 2.200 to 2.299 inclusive.

3.402 The maximum quantity of acceptable liquids shall not exceed 10 gallons for each cubic yard of uncompacted rubbish and refuse accepted for disposal during the same operation period.

3.403 Liquids and semi-liquids shall not be stored on the site in sumps.

3.404 Before the end of each day's operation, all liquids not integrated with rubbish shall be thoroughly mixed with dirt and deposited on the operating face of the fill.

3.405 All liquids and semi-liquids received shall be accompanied by an "Industrial Waste Haulers Report" on forms provided by the County Engineer. This form shall be signed by the producer of the waste and by the hauler and shall state that the waste is one or more of the materials listed under Items numbered 2.400 to 2.499 inclusive. This report shall then be signed by the person in charge of dumping operations and be kept at the dump site until collected by an Industrial Waste Inspector or other authorized representative of the County Engineer.

4.000 GENERAL OPERATING CONDITIONS

4.001 If the Certification attached to the Business License indicates that this waste disposal facility shall be maintained for the benefit of the general public, the

operator shall not refuse to accept materials from anyone during the posted hours of operation provided the materials can be accepted for disposal under the terms of this permit and the party seeking waste disposal services pays the regulation disposal charge, and provided that such acceptance does not violate the conditions of this permit.

4.002 If the Certification attached to the required business license states that this waste disposal facility shall be maintained for the general public, a sign approved by the County Engineer shall be posted at every entrance to this facility. This sign shall have letters of sufficient size and color contrast as to be read at a distance of 100 feet by a person with normal vision and shall include the name of the facility, the schedule of days and hours the facility will be open to the public as established by the certification, maximum and minimum prices as established by the certification and any other information considered essential by the permittee and/or the County Engineer.

4.003 The posted schedule of days and hours, when the facility will be open to the public, shall not prevent the operator from conducting his business at other times in addition thereto, provided operations are conducted as required by this permit.

4.004 Final covering of deposited material shall be made with not less than 2 feet of compacted rubbish free earth or other approved cover material. This cover shall be placed and brought to final elevation, as shown on the approved plans within six months after completion of fill operations in any portion of the site.

4.005 Sufficient equipment in good operating condition shall be available on the premises at all times to properly conduct operations in accordance with conditions of this permit.

4.006 Equipment used in this operation shall comply with all ordinances, laws, and regulations pertaining to safety and licensing.

4.007 Adequate drainage facilities shall be provided to intercept and drain storm water in a legal manner, to reduce to a minimum its percolation through the deposited rubbish, and to prevent erosion.

4.008 Before operations of the waste disposal facility commence, all other details of the site preparation shall be completed in accordance with approved operating plans, unless written agreement is obtained for the later installation of specific items.

4.009 The permittee shall make every reasonable effort to prevent or eliminate any public nuisance created by dust, odors, blowing of papers, or otherwise.

4.010 The permittee shall construct and maintain survey monuments, boundary fences and bench marks as shown on the approved operating plans or as the County Engineer may require for reference and control of operations as the work progresses.

4.011 All operations under this permit shall terminate ~~on or before~~ **according to lease.** No prejudice shall be created toward a request to extend this permit, if such request is made ~~prior to~~ **3 months prior to end of lease contract.**

5.000 SANITATION AND HEALTH REQUIREMENTS

5.001 All buildings shown on the approved operating plans or otherwise required by the conditions of this permit shall be constructed and maintained in such a manner as to prevent rodent harborage.

5.002 Any rodent infestation shall be immediately controlled by the proper use of poison, traps, or gas to the satisfaction of the County Health Officer.

5.003 An approved sanitary drinking water supply shall be provided and maintained on the premises.

5.004 Adequate toilet facilities shall be provided and properly maintained for the use of employees and all other persons who have business on the premises.

6.000 FIRE PREVENTION AND AIR POLLUTION REQUIREMENTS

6.001 A water supply system adequate for fire fighting and other purposes shall be constructed, as shown on plans approved by the County Engineer and shall be maintained and operated as circumstances demand.

6.002 The permittee shall immediately construct and maintain a firebreak around the perimeter of the dumping operations if, in the opinion of the County Engineer, it is considered necessary.

6.003 No burning of any kind shall be permitted in connection with disposal operations at this site. Any inadvertent fire which may occur on the premises or any underground smoldering shall be promptly reported to the Fire Department and to the County Engineer by the person in responsible charge of operations. In addition, it shall be the responsibility of the operator to immediately extinguish any such fire or underground smoldering to the satisfaction of the Fire Department and the County Engineer.

7.000 SALVAGE

7.001 Salvable materials may be separated from accepted materials provided they are removed daily and

confined to an area delineated for such use on the approved operating plans or an area designated in writing by the County Engineer or his authorized representative.

7.002 All combustible salvaged materials and such other materials as may be designated by the County Engineer or his authorized representative shall be removed from the storage area and deposited in the disposal area or taken to market when conditions develop in or adjacent to the salvage area, which in the opinion of a responsible governmental agency are unsightly, hazardous, a menace to health or sanitation, or a fire hazard.

8.000 SPECIAL CONDITIONS

8.001 Liquid wastes mixed with rubbish to facilitate compaction are limited to those specified in Items numbered 2.400 to 2.499 inclusive and in amounts specified in Item numbered 3.402. If additional liquid is needed for proper compaction, the liquid used will be unpolluted water or other liquid certified as acceptable for the purpose.

8.002 When it has been determined that materials, not specifically included in the original edition of this permit, are acceptable at this site, an extension of this section will set forth the description of and the regulations for such materials.

8.003 If the disposal site has been approved as a Class I facility, and the applicant has included in his application a request for approval of the acceptance of certain materials prohibited in Class II and III sites, additional conditions and regulations will be added to this permit as a continuation of this section, setting forth the requirements which will govern the acceptance and disposal of such materials.

51-2

COUNTY OF LOS ANGELES

DEPARTMENT OF COUNTY ENGINEER

730 Los Angeles County Engineering Building
108 West Second Street
Los Angeles 12, California

L.C.L. ✓
M.G.E. ✓
C.B.J.
F.E.J.
W.
L.

STAFF
Return to
File

DEC 9 1955

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
Room 504 Spring Arcade Building
541 South Spring Street
Los Angeles 13, California

M. G. EGGETT
DEC 13 1955

L. C. LARSON
DEC 12 1955

Attention: Mr. Matthew Eggett

Mr. John T. Leggett, Executive Officer
Lahontan Regional Water Pollution Control Board No. 6
407 West Line Street
Bishop, California

Partially reviewed

Gentlemen:

SUBJECT: Application for Renewal of Business License

Section 2231 (g) of Ordinance No. 5860 (Business License Ordinance) provides that the County Engineer certify to the Board of Supervisors:

> "Whether any other interested officer, department, or agency has indicated that applicable ordinances or regulations can be met by the applicant."

You are requested to indicate below whether applicable ordinances or regulations under your jurisdiction can be met by B.K.K. Company (I-416-20), 19200 South Main Street, Gardena, Bak

and return to this office not later than December 23, 1955.

Yours very truly,

John A. Lambie
COUNTY ENGINEER

Arthur Pickett

Arthur Pickett, Division Engineer
Industrial Waste Division

The above applicant (can) (cannot) meet all applicable ordinances or regulations under the jurisdiction of this office.

Remarks:

This Board has not reviewed all aspects of the operations at this site.

Signed:

LINNE C. LARSON, Executive Officer

L-11
10/55

COUNTY OF LOS ANGELES

DEPARTMENT OF
COUNTY ENGINEER AND SURVEYOR

730 Los Angeles County Engineering Building
108 West Second Street
Los Angeles 12, California

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
DEC 9 1954

DEC 1 1954

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
Room 504, Spring-Arcade Building
541 South Spring Street
Los Angeles 13, California

M. G. EGGETT
DEC 14 1954

L C LARSON
DEC 01 1954

Attention Mr. Matthew G. Eggett

Mr. John T. Leggett, Executive Officer
Lahontan Regional Water Pollution Control Board No. 6
322 North Main Street
Bishop, California

Gentlemen:

Subject: Application for Renewal of Business License

Section 2231 (g) of Ordinance No. 5860 (Business License Ordinance) provides that the County Engineer certify to the Board of Supervisors:

"Whether any other interested officer, department, or agency has indicated that applicable ordinances or regulations can be met by the applicant."

You are requested to indicate below whether applicable ordinances or regulations under your jurisdiction can be met by Bak Disposal Dump, 19200 South Main Street, Gardena, (I-416)

and return to this office not later than December 15, 1954.

Yours very truly,

William J. Fox
COUNTY ENGINEER AND SURVEYOR

Arthur Pickett

Arthur Pickett, Division Engineer
Industrial Waste Division

~~The above applicant (can) (cannot) meet all applicable ordinances or regulations under the jurisdiction of this office.~~

Remarks:

This Board has not reviewed the operations at this site.

Signed: REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

By Linne C. Larson
Linne C. Larson
Executive Officer

TENTATIVE

State of California
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
Los Angeles Region

RESOLUTION NO. ____

PRESCRIBING REQUIREMENTS FOR THE DISPOSAL OF WASTES AT A WASTE DISPOSAL FACILITY COMMONLY KNOWN AS THE B.K.K. PUBLIC DUMP IN LOS ANGELES COUNTY.

File No. 51-2

WHEREAS, a waste disposal facility, commonly known as the B.K.K. Public Dump is located at 19200 South Main Street, Los Angeles County, and is owned and operated by the B.K.K. Company, Inc., and

WHEREAS, since this waste disposal facility is located within the unincorporated area of Los Angeles County, the County Engineer on July 2, 1948, for the operation of this waste disposal facility, issued to the B.K.K. Company, Inc., Industrial Waste Permit No. 31 containing certain conditions and limitations pertaining to water pollution and nuisance; and

WHEREAS, the County Engineer on September 4, 1956, made certain modifications in Industrial Waste Permit No. 31; and

WHEREAS, the County Engineer on February 14, 1957, made further modifications in Industrial Waste Permit No. 31; and

WHEREAS, this Board at its regular meeting held on June 27, 1957, approved a request received from the County Engineer which stipulated that certain semi-liquid wastes could be disposed of in Class II Dumps if accomplished in strict compliance with conditions as outlined in the County Engineer's letter of May 24, 1957; and

WHEREAS, the Board also stipulated that disposal of such semi-liquid wastes would be considered separately after a case-by-case investigation of each Class II Disposal Site; and

WHEREAS, the County Engineer in a letter dated January 30, 1958, addressed to the B.K.K. Company is proposing to make extensive modifications to Industrial Waste Permit No. 31, and the County Engineer, by a copy of this letter transmitted to this Board is requesting the Board's approval of these amendments; and

WHEREAS, at the request of this Board, the State Department of Water Resources has submitted in their memorandum dated December 26, 1956, a geological and hydrological report on this disposal site; and

WHEREAS, the Board's staff has made an investigation of the disposal of wastes at this dump site; and

WHEREAS, based upon the above investigations and other information made available,

the Board finds that:

1. This disposal site is located in the central part of the West Coast Ground Water Basin. This ground water basin supplies more than 65,000 acre-feet of water annually for beneficial uses, including domestic, municipal, industrial, and agricultural purposes.

2. The ground water basin under the dump site consists of a series of sand and gravel layers separated vertically by relatively impermeable lenses of silt and clay. The uppermost water-bearing material is known as the semi-perched water-bearing zone, and the other water-bearing strata beneath this zone are known as the "200-foot sand", the "400-foot gravel", and the Silverado Zones.

3. At the site, the semi-perched zone is separated from the "200-foot sand" by a considerable thickness of sandy silt and clay lenses which restrict downward percolation. Limited lateral migration, however, may occur toward an area several miles to the southeast where continuity exists between the above-mentioned water-bearing zones.

4. The recorded high ground water elevation in the semi-perched zone in the vicinity of the dump site was 8.0 feet above sea level. Although similar high water levels may reoccur, five feet above sea level may be considered a reasonable maximum ground water elevation if drainage in the dump site and traversing drainage channel are adequately maintained.

5. The preservation of ground water quality for the above-mentioned beneficial uses is of great economic importance to municipalities in the West Coast Basin.

NOW, THEREFORE BE IT RESOLVED, that in order to prevent pollution of the receiving waters and to prevent creation of a nuisance, this Regional Water Pollution Control Board, in accordance with authority granted in

L. C. L. ✓
M.G.E. ✓
C. B. J.
F. E. I. ✓
W.
L.

STAFF
Return To
File

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

OFFICE OF CHIEF ENGINEER

MAILING ADDRESS:
BOX 2418
TERMINAL ANNEX
LOS ANGELES 54, CALIFORNIA

L. C. LARSON
MAR 13 1953

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
MAR 13 1953
2250 ALCAZAR STREET
LOS ANGELES
LOS ANGELES

March 9, 1953

2-3
Administration
Bak Disposal Company

Your File: I-416

M. G. EGGETT
MAR 13 1953

W. E. BRELJE
MAR 12 1953

Mr. William J. Fox
County Engineer and Surveyor
725 Los Angeles County Engineering Building
108 West Second Street
Los Angeles 12, California

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Reference is made to your letter of February 2, 1953, notifying this District that your department has amended Mr. Kazarian's permit to read:

> "No materials of any kind are to be deposited on a strip of land 50 feet wide, lying 25 feet on the easterly side and 25 feet on the westerly side of the flag line shown on plans dated December, 1950, prepared by Jones & Gilbert, Engineers,"

and that subsequent to the amended permit Mr. Kazarian had found it necessary to relocate the channel and has proposed to use the flag line as the westerly boundary instead of the center line and still maintain the 50-foot ~~width~~ of channel.

Relocation of this channel as described herein is satisfactory to this District.

Your attention is directed to the fact that no provision has been made to outlet this channel. This has in the past caused breaking out of the Dominguez Channel levee by pressure of waters impounded. This District would grant a permit for construction of an outlet into Dominguez Channel ~~upon~~ approval of prepared plans should Mr. Kazarian wish to make application.

Yours very truly,

H. E. Hedger, Chief Engineer

By M. E. Salsbury
Senior Assistant Chief Engineer

cc: Mr. Linne C. Larson,
Executive Officer
Regional Water Pollution
Control Board No. 4

Dr. Roy O. Gilbert,
Los Angeles County Health Officer
Attention: Mr. Loring Messier

M. Eggett

51-2

WILLIAM J. FOX
COUNTY ENGINEER
COUNTY SURVEYOR

OFFICE OF
COUNTY ENGINEER AND SURVEYOR
725 LOS ANGELES COUNTY ENGINEERING BUILDING
LOS ANGELES

COPY

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
FEB 4 1953
LOS ANGELES

L. C. L.
M. G. E. ✓
C. B. J.
F. E. J. ✓
V.
I.

February 2, 1953

Mr. H. E. Hedger
L.A. County Flood Control District
2250 Alcazar Street
Los Angeles, California

BAK DISPOSAL COMPANY
(I-416)

STAFF
Return To
File

W. E. BRELJE FEB 6 1953
L. C. LARSON FEB 7 - 1953
M. G. EGGETT FEB 5 - 1953

Attention: Mr. N. B. Hodgkinson

Dear Sir:

Reference is made to your letter of November 6, 1952, wherein you suggest that this office secure detailed plans relative to the request of Mr. Kazarian to relocate the natural drainage channel passing through the disposal area of the project located at 19200 South Main Street.

Your attention is called to the plan prepared by Jones & Gilbert, Engineers, which was forwarded to your office on January 3, 1951. Shown on the plan is the flagline of the Dominguez Branch Channel.

On October 16, 1952, this Department, after approval of your office by letter of January 22, 1952, amended Mr. Kazarian's permit to read:

"No materials of any kind are to be deposited on a strip of land 50 feet wide, lying 25 feet on the easterly side and 25 feet on the westerly side of the flagline shown on plans dated December, 1950, prepared by Jones & Gilbert, Engineers."

Since then, Mr. Kazarian has found it necessary to relocate the channel and has proposed to use the flagline as the westerly boundary instead of the center line and still maintain the 50 foot width of the channel. This constitutes the only change.

Yours very truly,

William J. Fox
COUNTY ENGINEER AND SURVEYOR

Arthur Pickett

Arthur Pickett, Division Engineer
Industrial Waste Division

AGP-LQ:BS

L. C. L.
M.G.E. ✓
C. B. J.
F. F. J. ✓

STAFF
Return To
File

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

OFFICE OF CHIEF ENGINEER

MAILING ADDRESS:
BOX 2418
TERMINAL ANNEX
LOS ANGELES 54, CALIFORNIA

2250 ALCAZAR STREET
LOS ANGELES

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
NOV 13 1952
LOS ANGELES

November 6, 1952

2-3
Administration
Bak Disposal Company

Your File: I-416

W. E. BRELJE
NOV 13 1952

L. C. LARSON
NOV 13 1952

M. G. EGGETT
NOV 13 1952

Mr. William J. Fox
County Engineer and Surveyor
725 Los Angeles County Engineering Building
108 West 2nd Street
Los Angeles 12, California

Attention: Mr. Arthur G. Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Reference is made to your letter dated September 30, 1952, enclosing letter from Ben K. Kazarian, requesting revision of his Industrial Waste Permit relative to the deposition of waste material in the natural drainage channel.

Please be advised that this District will be unable to report upon this request without detailed plans as to the applicant's proposal. It is suggested that your office secure such plans and transmit them to us for further consideration.

Yours very truly,

H. E. Hedger, Chief Engineer

By
M. E. Salsbury
Senior Assistant Chief Engineer

cc: Roy O. Gilbert, M.D.
County Health Officer
Attention: Mr. Loring Messier

Mr. Linne C. Larson, Director
State Water Pollution Control Board No. 4
Attention: Mr. Matthew Eggett

L. C. L.
M. G. E.
C. B. J.
F. E. J.
STAFF
Return To
File

OFFICE OF COUNTY HEALTH DEPARTMENT

October 22, 1952

REGIONAL WATER POLLUTION CONTROL
OCT 28 1952
LOS ANGELES

51-2

W. E. BRELJE
OCT 27 1952

L. C. LARSON
OCT 24 1952

M. G. EGGETT
OCT 27 1952

Mr. William J. Fox,
County Engineer and Surveyor
108 West Second Street
Los Angeles, California

Attention: Mr. Arthur Pickett, Division Engineer
Industrial Waste Division

Dear Sir:

Subject: BAK Disposal Company (Your File I-416)

We are in receipt of your communication of September 30, 1952 appertaining to a proposed modification of the BAK Disposal Company industrial waste permit.

In view of the conditions involved, it is our recommendation that further information be provided by the applicant in order that his request could be more thoroughly considered and evaluated.

It is our recommendation that maps as well as any other supporting data as may be necessary be provided for this purpose.

Very truly yours,

ROY O. GILBERT, M. D.
Health Officer

By H. L. Messier
H. L. Messier, Asst. Director
Bureau of Sanitation

HLM:vr
cc: Mr. Matthew Eggett,
Regional Water Pollution Control Board # 4
Mr. Milan Ransom,
L. A. County Flood Control District
Mr. David Colfelt

Mr. Eggett

WILLIAM J. FOX
COUNTY ENGINEER
COUNTY SURVEYOR

L. C. L. _____
M. G. E. _____
C. B. J. _____
F. _____
V. _____
L. _____
_____
_____
STAFF _____
Return To _____
File _____

OFFICE OF
COUNTY ENGINEER AND SURVEYOR
725 LOS ANGELES COUNTY ENGINEERING BUILDING
LOS ANGELES

51-2

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
COPY
SEP 30 1952
LOS ANGELES

L C LARSON
SEP 30 1952

M. G. EGGETT
OCT 3 - 1952

September 24, 1952

BAK DUMP (I-416)

W. E. BRELJE
OCT 3 1952

Mr. Ben K. Kazarian
Suite 315
315 West Ninth Street
Los Angeles 15, California

Dear Sir:

This will acknowledge receipt of your request to change the alignment of the Flood Control Channel passing through your property, located at 19200 South Main Street, Gardena.

The matter will be considered in the meeting of the Industrial Waste Committee, to be held in the near future, and you will be notified of their findings.

Yours very truly,

William J. Fox
COUNTY ENGINEER

Arthur Pickett

Arthur Pickett
Division Engineer
Industrial Waste Division

AGP-RNA:HP

cc: AGP
BRM
M.G. Eggett
N.B. Hodgkinson
Lorring Messier
RNA
WBB

May 20, 1952

Mr. William J. Fox
County Engineer and Surveyor
725 Los Angeles Co. Engineering Bldg.
108 West Second Street
Los Angeles 12, California

SUBJECT: BAK Dump (I-416)
(Our File No. 51-2)

Dear Sir:

Reference is made to your letter of March 11, 1952, requesting this Board to consider the amended conditions to the County's Industrial Waste Permit No. 31 covering the operation of the BAK Disposal Site at 192nd Street and Main Street, which amended conditions are contained in your letter of February 1, 1952, to Mr. Ben K. Kazarian.

Pursuant to a letter to you, dated March 25, 1952, from the executive officer, the Board at its regular meeting held on May 15, 1952, considered the above request, and the discussion on this matter revealed the following information:

1. Industrial Waste Disposal Permit No. 31 was issued by the County Engineer and Surveyor, to the operator of this disposal site, prior to the activation of this Board.

2. The new amended conditions imposed by the County Engineer and Surveyor specify construction requirements in an attempt to avoid recurrence of liquid or semi-liquid industrial wastes overflowing into the Dominguez Channel and ultimately into the Los Angeles Harbor, which occurred during the heavy storms this winter. Although it is the desire of this Board that wastes from this disposal site be prevented from overflowing into the Dominguez Channel and ultimately into the Harbor, the Board is prohibited by Section 13064 of the Water Code from specifying such detailed construction specifications to meet its requirements.

3. The disposal of industrial wastes at the BAK Disposal Site mentioned in the County Engineer's letter of March 11, 1952, referred to above, was considered by this Board at its regular meeting held on May 24, 1951, and based upon the discussion at this meeting, the Board adopted a motion to hold in abeyance any change in the County's requirements for the BAK Dump until the State Division of Water Resources had completed and submitted their report on the "Investigation of Safe Dump Sites in the South Coastal Basin within the Los Angeles Region."

4. A progress report on the above investigation has been submitted to the Board, and the Division of Water Resources has advised that the final

REQUIREMENT NO. 189

report will be completed by June 30, 1952. However, based upon this progress report "Suggested Tentative Objectives for Control of Water Pollution from Disposal of Wastes on Land in the South Coastal Basin within the Los Angeles Region" have been formulated by the Board, and these objectives have been transmitted to all Federal, State, and local agencies concerned for their review, study, comments, and/or objections before the Board adopts officially any objectives concerning this problem.

5. After the Board has officially adopted these objectives, which objectives are to be considered as the general policy of this Board in its review of each individual site, the disposal of wastes at the BAK Dump and at all other dumps in this area will be reviewed by the Board with the local enforcement agencies concerned.

Upon completion of the above discussion, this Regional Water Pollution Control Board unanimously adopted the following motion:

"Pending the adoption by this Board of 'Objectives for Control of Water Pollution from Disposal of Wastes on Land in the South Coastal Basin within the Los Angeles Region', all solid, semi-liquid, or liquid wastes disposed of at the BAK Disposal Site shall be prevented from entering into Dominguez Channel and ultimately into the Los Angeles Harbor; that the operator shall provide adequate facilities to meet this requirement; and that the County Engineer and Surveyor be notified by letter of the Board's action, and that a copy of this letter be forwarded to Mr. Ben K. Kazarian, operator of the BAK Disposal Company."

Very truly yours,

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

By Linne C. Larson
Linne C. Larson
Executive Officer

LCL/lf
cc: Mr. Ben K. Kazarian,
Suite 315, 315 W. 9th St.,
Los Angeles 15, California

I hereby certify that the above and foregoing is a full, true and correct copy of the requirements prescribed by the Los Angeles Regional Water Pollution Control Board (No. 4), State of California, which were passed and adopted by said Board on May 15, 1952.

Linne C. Larson
LINNE C. LARSON
Executive Officer

State of California
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
Twenty-third Regular Meeting
May 15, 1952

ITEM NO. 7 ON AGENDA

MEMORANDUM:

File No. 51-2

TO: Regional Water Pollution Control Board No. 4

Date: May 7, 1952

FROM: Linne C. Larson, Executive Officer

SUBJECT: Consideration of communication from Los Angeles County Engineer and Surveyor, RE: Bak Disposal Company dump site adjacent to Dominguez Slough

Reference is made to the attached letter dated March 11, 1952, from the Los Angeles County Engineer and Surveyor requesting the Board to consider amended conditions to the Industrial Waste Disposal Permit No. 31 for operation of the Bak Disposal Site at 192nd Street and Main Street, which amended conditions are attached.

Industrial Waste Disposal Permit No. 31 was issued by the County to the operator prior to the activation of this Board.

Investigation reveals that the new amended conditions imposed by the County specify construction requirements in an attempt to avoid recurrence of liquid or semi-liquid industrial wastes overflowing into the Dominguez Slough and ultimately into the Harbor which occurred during the recent heavy storms. Although desirable, it is believed that the Board is prohibited by Section 13064 of the Water Code from specifying such detailed construction specifications.

Receipt of the County Engineer's letter was acknowledged in a letter dated March 25, 1952 (see copy attached). As indicated in this letter, the operation of the Bak Dump was discussed last year by the Board at its regular meeting held on May 24, 1951. See Item No. 3 on the agenda and the minutes for the May 24, 1951, regular meeting. Based upon the discussion at this meeting, the Board adopted a motion to hold in abeyance any change in the County's requirements for the Bak Dump until the Division of Water Resources had completed and submitted their report on the "Investigation of Safe Dump Sites in South Coastal Basin within Los Angeles Region."

As you recall, the Division has submitted its first progress report on this investigation to the Board, and the Division has advised that the final report will be completed by June 30, 1952. Based upon the progress report, tentative "Objectives for Control of Water Pollution from Disposal of Wastes on Land in the South Coastal Basin within the Los Angeles Region" have been formulated by the Board, which were discussed at the last regular meeting held on March 13, 1952. Pursuant to the Board's direction these objectives have been transmitted to the governmental agencies concerned for their review, study, comments, and/or objections before the Board adopts officially any objectives concerning this problem.

These data are submitted for consideration by the Board and for appropriate action and advice to the executive officer.

Respectfully submitted,

Linne C. Larson

LINNE C. LARSON
Executive Officer

LCL/lf
encls.

43386 4-51 1M SPO

STATE OF CALIFORNIA

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

MEMORANDUM:

Did you discuss these amendments with DWR? - Prepare report to Board for Agenda folder.

To: L. C. Larson

Date: March 28, 1952

From: M. G. Eggett

L. C. LARSON
MAR 31 1952

Subject: BAK DISPOSAL COMPANY - File No. 51-2

The conditions as outlined by the Office of the County Engineer and Surveyor in letter of February 1, 1952, to Mr. Kazarian were reviewed in detail with Mr. Arthur Pickett of Los Angeles County Industrial Waste Division.

Mr. Pickett advises that Condition A, which states that pits constructed for the storing of liquid or semi-liquid industrial waste are not to be excavated in locations where the ground surface elevation is below 16 ft. U.S.G.S. Datum, is based upon action taken by the Los Angeles County Board of Supervisors in Ordinance No. 5070 of 1948, which Ordinance in effect establishes 15.5 ft. as the maximum high water level in this area, and that locations below such level are subject to inundation.

Mr. Pickett acknowledges that recent storm drainage facilities conceivably could modify this figure insofar as threat of inundation is concerned, however, as this ordinance is on the books, he felt it a reasonable basis upon which to establish minimum elevations for construction of industrial waste pits.

Conditions B and C are matters of specific concern to the Industrial Waste Division; and although they were reviewed briefly, the writer advised that this office could take no official action in these regards.

MGE:lf

Matthew G. Eggett

51-2

Stenciled 4/29/52

March 25, 1952

Mr. Wm. J. Fox
County Engineer and Surveyor
725 L. A. County Engineering Bldg.
108 West Second Street
Los Angeles 12, California

SUBJECT: BAK DUMP (I-416)
(Our File No. 51-2)

Dear Sir:

Receipt is acknowledged of your letter dated March 11, 1952, requesting that this Board consider the amended conditions to the permit for operation of the Bak Disposal Dump, which are contained in your letter dated February 1, 1952, to Mr. Ben K. Kazarian, operator.

In accordance with your request, this matter will be placed on the agenda for consideration by this Board at its next regular meeting to be held on May 15, 1952, at 9:30 A.M., in the Board's offices.

The operation of the subject dump was discussed last year by this Board at its regular meeting held on May 24, 1951, and enclosed for your information is a copy of our complete file, including a copy of the Board's minutes on this subject.

In the enclosed file your attention is particularly invited to the report submitted to this Board by the State Division of Water Resources contained in their letter dated February 27, 1951, and also the recommendations contained in the State Division of Fish and Game letter dated March 12, 1951, and the State Department of Public Health letter dated March 13, 1951.

You will note in the enclosed copy of the Board's minutes, that the Board adopted a motion to hold in abeyance any change in the County's requirements for the Bak Dump, until a complete report is received from the State Division of Water Resources.

On January 17, 1952, the Division of Water Resources submitted to this Board a progress report on the investigation referred to above. Based upon the technical information contained in this report and other data made available to this Board, Suggested Tentative Objectives have been formulated for the control of water pollution from wastes disposed of on land in the South Coastal Basin within the Los Angeles Region. The Board at its regular meeting held on March 13, 1952, directed that these Suggested Tentative Objectives including a copy of the Division of Water Resources report be submitted to all interested governmental agencies for their review and

study. This material is now being reproduced for distribution, and it is anticipated that you will receive this material the early part of next week.

Relative to future disposal sites in the area adjacent to the Bak Dump, your attention is invited to our letter to you dated March 17, 1952, Subject: "Proposed Refuse Disposal Sites for County Sanitation Districts, Los Angeles County (Our File No. 52-24) (Your File No. I-1200).

The executive staff of this Board is now making an investigation of the amended conditions, referred to in Paragraph 1 above, for a report to be submitted to the Board at their next regular meeting to be held on May 15, 1952.

Very truly yours,

LINNE C. LARSON
Executive Officer

LCL/lf
encls.

51-2

County of Los Angeles
DEPARTMENT OF
County Engineer and Surveyor
725 LOS ANGELES COUNTY
ENGINEERING BUILDING
108 WEST SECOND STREET
Los Angeles 12, California
MUtual 9211

WILLIAM J. FOX
COUNTY ENGINEER
COUNTY SURVEYOR

R. L. GREGORY
CHIEF DEPUTY

L. C. L.
M. G. E.
C. R. J.
STAFF
Return To
File

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
MAR 14 1952
LOS ANGELES

March 11, 1952

Stenciled 4/29/52

IN REPLY PLEASE REFER TO:

BAK DUMP (I-416)

MAR 15 1952
L. C. LARSON

M. G. EGGETT

MAR 20 1952

Regional Water Pollution
Control Board No. 4
5th Floor - Spring-Arcade Bldg.
541 S. Spring Street
Los Angeles, California

Gentlemen:

I hereby request that your Board consider the amended conditions to the permit for operation of the Bak Disposal site at 192nd and Main Streets, Dominguez, which are contained in the attached letter. The operator, Mr. Ben K. Kazarian, has objected to these conditions and has stated that he considers them to be unreasonable, and discriminatory.

These conditions were imposed by this office in an attempt to avoid recurrence of conditions which were reported to us by your office, the State Division of Fish and Game, and others, following the recent heavy storms.

For your information, the original permit granted this operator provides for acceptance of rotary mud, tank bottoms, and similar wastes if thoroughly mixed with the rubbish accepted at the site.

Because of operational difficulties, Mr. Kazarian has followed the practice of digging trenches approximately 200 feet long, 100 feet wide, and 10 feet deep, which he fills with liquid and semi-liquid wastes, and thereafter backfills with rubbish. The large quantity of water contained in the waste is quickly absorbed in the rubbish and assists in the compaction process.

Essentially, the new conditions were intended to prohibit the construction of any sumps for the acceptance of liquid or semi-liquid industrial wastes at locations where the ground surface is below 16 feet U.S.G.S. datum. This condition was established for the reason that all lands in this vicinity below elevation 15.5 have been declared subject to periodic inundation by flood waters.

The remaining conditions would require that the berms around any pit constructed be not less than 3 feet in height and that the County Engineer must approve in writing the location and dimensions of any such pits.

Yours very truly,

William J. Fox
COUNTY ENGINEER AND SURVEYOR

WJF-AGP:ES

Enc. (1)

Mr. Matthew Eggett

51-2

WILLIAM J. FOX
COUNTY ENGINEER
COUNTY SURVEYOR

L.C.L. ✓
M.C.E. ✓
C.B.J.
F.F.J.
V. ✓
L.

STAFF
Return To
File

OFFICE OF
COUNTY ENGINEER AND SURVEYOR
725 LOS ANGELES COUNTY ENGINEERING BUILDING
LOS ANGELES

COPY

W. E. BRELJE

MAR 4 1952

M. G. EGGETT

MAR - 7 1952

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
FEB 28 1952
LOS ANGELES

February 1, 1952

Mr. Ben K. Kazarian
Suite 315
315 West Ninth Street
Los Angeles 15, California

BAK DISPOSAL CO. (I-416)

Dear Sir:

Inspection of your dump located at 19200 South Main Street after the recent storm, together with complaints received by this office from interested governmental agencies and others, require the following modifications of Industrial Waste Disposal Permit No. 31 covering your operations at this location.

Effective immediately, your permit is amended by adding thereto the following conditions:

Condition A - Pits constructed for the purpose of storing or confining liquid or semiliquid industrial waste shall not be excavated in locations where the ground surface elevation is below 16 feet, U.S.G.S. datum.

Condition B - Any pit constructed pursuant to Condition A above shall be completely surrounded by a berm meeting the approval of the County Engineer and not less than 3 feet in height above the surrounding land.

Condition C - No pit intended for the receiving or storing of liquid or semiliquid industrial waste shall be constructed on the premises until the location and dimensions thereof have been approved in writing by the County Engineer.

Yours very truly,

William J. Fox
COUNTY ENGINEER AND SURVEYOR

R. L. Gregory

R. L. Gregory, Chief Deputy

RLG-RNA:MS

Registered Mail
Return receipt requested

State of California
REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

Agenda Item No. 3
May 24, 1951

To: Regional Water Pollution Control Board No. 4 Date: May 15, 1951

From: Linne C. Larson, Executive Officer

Subject: Discussion of BAK Disposal Co. Dump

Reference is made to the following copies of attached correspondence relative to subject dump:

(a) Letter dated January 3, 1951, from the County Engineer and Surveyor which enclosed the following copies of attached information relative to this subject:

1. Copy of letter from Ben K. Kazarian requesting that Conditions #9, 17, and 19 of their Industrial Waste Permit No. 31 be amended.

2. An excerpt from a memo regarding conference held in the County Engineer's Department. This memo helps to clarify Mr. Kagarian's letter.

3. Copy of the Conditions and Limitations which were attached to Permit No. 31.

This letter was transmitted to this office in accordance with procedures established between this Board and the office of the County Engineer and Surveyor. The Board was advised that this application would be discussed at an Industrial Waste Committee meeting in the near future, and requested that this office contact all State agencies concerned in this proposed operation and, if possible, secure commitments from them.

A preliminary investigation by this office revealed the following information relative to the type of materials permitted to be disposed of at the subject dump:

(a) Los Angeles County Industrial Waste Permit No. 31 includes the two following sections:

"3. Prevent dumping of garbage and certain industrial wastes, particularly toxic chemicals, acid or caustic sludge, or similar objectionable substances."

"4. Upon request of the operator, the County Engineer will approve a list of materials which may be dumped. No other materials shall be accepted."

(b) Under date of October 13, 1949, a letter from the County Engineer and Surveyor to the Bak Disposal Co, which defined additional acceptable materials as follows: "market refuse as well as chemical and industrial wastes, liquid or solid." Acid sludge, neutralized or otherwise, was particularly prohibited. This letter also required that a complete record of each load of chemical and industrial wastes accepted for disposal be

submitted monthly to the County Engineer. This letter further stated: "If any wastes accepted for disposal may, in the opinion of the County Engineer, result in the creation of a muisance, hazard to health, or menace to the quality of natural water supplies or result in a violation of regulations of any governmental agency, the acceptance of such wastes shall be discontinued immediately upon notice by the County Engineer."

In view of the above information, and in view of the fact that it was proposed that no depth limits of excavation should be imposed, and furthermore since the operator was presently excavating to Elevation 1 or 2 above sea level at which point water was encountered, this office felt that technical assistance was needed relative to the geology and hydrology of this dump site. Therefore, in our letter dated January 31, 1951, to the Division of Water Resources, a technical report was requested together with any recommendations that the Division of Water Resources desired to make for the protection of the waters of the State involved in this operation.

In a letter dated February 27, 1951, (copy attached) the Division of Water Resources submitted their technical report. The Division of Fish and Game in a memo dated March 12, 1951, (copy attached) submitted their recommendations, and the State Dept. of Public Health in a letter dated March 13, 1951, (copy attached) submitted their recommendations.

It will be noted that the recommendations contained in the report of the Division of Water Resources are in conflict with limitations and conditions contained in the County's Industrial Waste Permit No. 31 issued to the Bak Disposal Co. Therefore, the executive officer on March 5, 1951, transmitted a letter to the County Engineer and Surveyor enclosing a copy of the Division of Water Resources' report, and suggested that a meeting of the Industrial Waste Committee be held to discuss the recommendations contained in the Division of Water Resources' report. This meeting was held on April 3, 1951, in the County Engineer's office, and attached is a copy of the minutes of this meeting.

Pursuant to agreement reached at this meeting, this office immediately initiated a survey of all the dumps in this area, and the information and data derived from our survey will be presented to the Board at the meeting.

With reference to the "Survey and Investigation to determine safe dump sites for the disposal of combustible and non-combustible rubbish and refuse in the South Coastal Basin within the Los Angeles Region" now being made by the Division of Water Resources for this Board, we have been advised that this investigation is approximately 25% completed, and that it is expected that this project will be about 40% completed by June 30, 1951.

At the suggestion of Mr. Arnold, this item has been placed on the agenda for discussion at this meeting.

The Division of Water Resources have been requested to submit a progress report to the Board on the study, referred to above.

Mr. Ted Niederhofer, who is in charge of issuing permits for dumps in the City of Los Angeles, has been asked to attend this meeting.

Respectfully submitted,

Linne C. Larson

Linne C. Larson, Executive Officer

LCL/lf
encls.

32461 8-50 2M SPO

STATE OF CALIFORNIA

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

MEMORANDUM:

To: Mr. Larson **Date:** 4-3-51

From: M. G. Eggett

Subject: BAK DISPOSAL File 51-2

Los Angeles County Industrial Waste Permit No. 31 included the two following sections:

"3. Prevent dumping of garbage and certain industrial wastes, particularly toxic chemicals, acid or caustic sludge, or similar objectionable substances.

"4. Upon request of the operator, the County Engineer will approve a list of materials which may be dumped. No other materials shall be accepted."

Under date of October 13, 1949, letter from County to the company defined additional acceptable materials. These are market refuse as well as"chemical and industrial wastes, liquid or solid." Excepted,however, is "Acid sludge .....neutralized or otherwise."

In this letter the County also required that a monthly report be submitted being " a complete record of each load of chemical and industrial wastes accepted for disposal. This letter further states:

"If any wastes accepted for disposal may, in the opinion of the County Engineer, result in the creation of a nuisance, hazard to health, or menace to the quality of natural water supplies or result in a violation of regulations of any governmental agency, the acceptance of such wastes shall be discontinued immediately upon notice by the County Engineer."

The Division of Water Resources lists the following as unacceptable:

"Liquid or water soluble organic industrial wastes
Oils, fats and greases
Tank bottoms from the storage of crude oils
Contaminated and/or polluted oil well drilling muds
Toxic salts of metals
Creosote or phenolic compounds
Paints and varnishes
Drugs and medicines
Brines
Caustics
Waste acids
Acid sludges"

51-2

(6)

MINUTES OF THE INDUSTRIAL WASTE COMMITTEE MEETING

TUESDAY, April 3, 1951, 1:30 P.M.

Held in the office of the County Engineer
Room 728, Los Angeles County Engineering Building
108 West Second Street, Los Angeles, California

L C LARSON
APR 16 1951

Those Present Were:

Mr. Dave Willets, State Division of Water Resources
Mr. Don McKillop, State Division of Water Resources
Mr. Don Fawcett, State Division of Water Resources
Mr. Larry James, State Division of Water Resources
Mr. Linne G. Larson, State Regional Water Pollution Control Board #4
Mr. M. G. Eggett, State Regional Water Pollution Control Board No. 4
Mr. M. W. Ransome, Los Angeles Flood Control District
Mr. Loring Messier, Office of the County Health Officer
Mr. Lyle Haynes, Office of the County Health Officer
Mr. A. G. Pickett, Office of the County Engineer
Mr. Wayne Clark, Office of the County Engineer
Mr. W. B. Baldwin, Office of the County Engineer

Agenda:

BAK DISPOSAL COMPANY (I-416)
19200 S. Main Street

Mr. Larson stated that the recent application from the Bak Disposal Company for revision of their waste disposal permit had been referred to the Division of Water Resources for recommendation. The recommendation from the Division of Water Resources indicated that there was a difference of opinion between various governmental agencies relative to the geology and hydrology in the area and he had therefore requested the Industrial Waste Committee to review this permit.

Mr. Willets stated that this dump was located in alluvial fill composed of lenses of sand and clay which would allow some percolation. He was opposed to allowing the disposal of any toxic or pollutionable substances in any alluvial fill. The area is surrounded with several shallow wells containing good water. The deposit of pollutionable materials in this dump is apt to pollute this semi-perched water, and possibly even lower strata.

Mr. Pickett stated that his department had made a detailed study of the area adjacent to Dominguez Slough approximately five years ago from logs of all known available wells located in the area at that time. This study indicates that the area was capped with thick lenses of clay. Prior to allowing the Bak Disposal Company to accept industrial wastes there had been no outlet for such wastes other than the California Salvage Corporation which hauls such wastes out to the ocean and that this cost was prohibitive. From the enforcement angle, the governmental agencies must prove pollution or threaten-

ed pollution before any action can be taken in court. Mr. Pickett has always been opposed to the deposit of any material other than solid fill in permeable areas but questioned whether any serious pollution threat exists in this area. The fact that the brine carried by the Dominguez Channel has not polluted the water in adjacent wells supports this theory.

Mr. Larson agreed that there must be an existing pollution or threat of pollution before they could ask action from the courts. Since there was no existing pollution the case resolved itself into one of threatened pollution.

Mr. Pickett stated that there were several other dumps in the area, some of which were located in the City of Los Angeles, which were receiving the same type of materials and suggested that if any action were taken on the Bak Dump, similar action should be taken on all of the other dumps in the area.

Since the Division of Water Resources is nearing the completion of a preliminary report on areas in the South-Coastal Basin which could be safely used as dump sites for industrial wastes, it was decided to wait until the completion of this report before taking any action. In the meantime the executive officer of the Regional Water PollutionBoard will contact the City of Los Angeles and review any permits issued by them for dumps in this area. After receiving this report from the Division of Water Resources another meeting will be held to determine what action should be taken on all dumps in this area.

Respectfully submitted,

C. E. ARNOLD
County Engineer and Surveyor

By /s/ Arthur Pickett
Arthur Pickett
Division Engineer
Industrial Waste Division

WBB/kk

copied 4-16-51
cw

32461 8-50 2M SPO

STATE OF CALIFORNIA

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

MEMORANDUM:

To: F I L E S Date: 3-19-51

From: Linne C. Larson

Subject: Bak Disposal Company (County File No. I-416) (Our File No. 51-2)

CHRONOLOGICAL HISTORY OF CASE

1. Conference in County Engineer's Office on December 7, 1950, on matters pertaining to the operation of this dump

The following were present at this conference:

A. G. Pickett	County Engineer & Surveyor
B. R. Mathieson	" " " "
A. B. Collins	Flood Control District
Ben Kazarian	Bak Disposal Company
Maynard Henry	" " "

At this conference the problem of amending Item Nos. 9, 17, and 19 of their Industrial Waste Permit No. 31, issued June 28, 1948, and amended on October 13, 1949, was discussed.

At this conference the following was agreed upon:

Item No. 9 — That the maximum height of fill should not exceed elevation 22 feet above sea level.

Item No. 17 — "In consideration of the fact that the area is underlaid by a thick clay deposit, it was agreed that no depth limits should be imposed. Presently they are cutting to elevation 1 or 2 at which point ground water is encountered. It is their intention to cut in most cases until ground water is reached, therefore, the depth will vary somewhat with the season."

Item No. 19 — "Therefore, since the property owners would be the interested party, it was agreed that Mr. Henry and they should work out a channel location satisfactory to both parties and when this is done a row of stakes will be set along the location and the dumping operations will be held a reasonable distance (50' was considered adequate) westerly of these stakes."

2. Letter to A. Pickett dated December 21, 1950, from Bak Disposal Company asking that Conditions #9, 17, and 19 of the Industrial Waste Permit No. 31 be amended in accordance with the above agreements.

3. Letter from County dated January 3, 1951 - Received in this office January 9, 1951.

Letter enclosed the following:

(a) Copy of letter from Ben K. Kazarian requesting that Conditions #9, 17, and 19 of their Industrial Waste Permit No. 31 be amended.

(b) An excerpt from a memo regarding conference held in the County Engineer's department. This memo helps to clarify Mr. Kazarian's letter.

(c) Copy of the Conditions and Limitations which were attached to Permit No. 31.

(d) A map showing a flag line mentioned in their letter. (Encl (a) above)

This letter was transmitted to this office in accordance with the procedures as established between the Regional Board and the County Engineer& Surveyor.

This letter advised the Regional Board that this application would be discussed at an Industrial Waste Committee meeting in the near future, and requested that this office contact all State agencies which in our opinion will be concerned with this proposed operation and, if possible, secure commitments from them.

4. On January 31, 1951, this office in a letter to the Division of Water Resources requested a technical report together with any recommendations that they care to make for the protection of the waters of the State involved in this operation.

After a preliminary investigation by this office, and in view of the fact that it was proposed that no depth limits should be imposed, and furthermore since the operator was presently excavating to elevation 1 or 2 at which point good water was encountered, this office felt that technical assistance was needed relative to the geology and hydrology of this dump site; therefore, the above request was made to the Division of Water Resources.

5. On February 23, 1951, this office received a copy of a letter dated February 20, 1951, addressed to Mr. Ben Kazarian from the County Engineer & Surveyor which amended Industrial Waste Permit No. 31 as follows:

CONDITION NO. 1	-	Deleted
CONDITION No. 9	-	shall read: "Final elevation of filled ground shall not exceed 22 feet U.S.G.S. datum."
CONDITION No. 13	-	deleted
CONDITION No. 17 and 19	-	The permittee has complied with these conditions and may utilize and fill all land up to the flagged line as shown on map submitted with request.

6. On February 28, 1951, this office received the technical report with recommendations from the Division of Water Resources dated February 27, 1951. (See copy attached)

7. On March 5, 1951, this office transmitted a letter to the County suggesting that a meeting of the Industrial Waste Committee be held to discuss the recommendations contained in the Division of Water Resources report.

8. On March 14, 1951, this office received a letter from the State Division of Fish and Game dated March 12, 1951, which concurs in general with the Division of Water Resources Report (copy attached)

9. On March 14, 1951, this office received a letter from the State Department of Public Health dated March 13, 1951, which concurs in general with the Division of Water Resources Report and with further suggestions. (See copy attached)

Linne C. Larson

LCL/lf

95338 9-48 5M ② SPO

51-2

Resent
Received
Eggett

STATE OF CALIFORNIA
SAN FRANCISCO 11

M. G. EGGETT
MAR 14 1951

Inter-Departmental Communication

To: Los Angeles Regional Water Pollution Control Board
541 South Spring Street
Los Angeles, California

Attention: Mr. Linne C. Larson, Executive Officer

File No.

Date: March 12, 1951

Subject: Bak Disposal Company Dump Site

From: **Division of Fish and Game** Bureau of Fish Conservation

L. C. LARSON
MAR 19 1951

Reference is made to your letter of January 31 and also the Division of Water Resource's report dated February 27, 1951. The Division of Fish and Game has reviewed this proposal and recommends that no toxic or highly pollutional substances be accepted for disposal at this site because of the close proximity of Domingues Slough. A partial list of materials that would be considered highly pollutional would include all products of petroleum origin including waste products from refining and drilling operations and any other substances toxic to aquatic life.

R. M. PAUL
Sanitary Engineer

RMP:jg

cc: BSE
DWR
SWPCB
BP-LA

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
MAR 13 1951
LOS ANGELES

L. C. LARSON
MAR 13 1951

Dictated by Mr. Paul and signed
in his absence to avoid delay.

Pub Health
Rept rec.
3-14-51
Copies made
for agenda 3-16-51 (6)
cw.

51-2

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

WILTON L. HALVERSON, M.D.
DIRECTOR OF PUBLIC HEALTH

MAR 14 1951

BUREAU OF
SANITARY ENGINEERING
703 STATE BUILDING
LOS ANGELES 12, CALIFORNIA

March 13, 1951

M. G. EGGETT
MAR 16 1951

REGIONAL WATER POLLUTION CONTROL BOARD
MAR 14 1951
LOS ANGELES

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
5th Floor, Spring Arcade Building
541 South Spring Street
Los Angeles 13, California

Subject: Bak Disposal Co. Dump Site

Dear Mr. Larson:

We have by referral from the Division of Water Resources their letter of February 27, 1951, reporting to you on the Bak Disposal Dump Site (19200 South Main Street), with request that we review and comment regarding public health considerations.

In addition to the study by the State Division of Water Resources of conditions surrounding this operating dump, I understand the Industrial Waste Section of the Los Angeles County Engineer's Office reviewed the matter of establishment of the dump here some years ago and approved, under certain provisions, the establishment of the dump. Since that time, they have observed and approved the operations, with the advice of the Los Angeles County Health Department, working under the authority of a county ordinance.

It appears that compliance with recommendation two of the State Engineer's report - "That no toxic or highly pollutional substances be accepted for disposal at this site" - will avoid the creation of conditions that may constitute a health hazard.

However, I would suggest, in order to further clarify the requirement, that the provision be enlarged to provide that no grossly contaminated material be accepted for disposal. Such a provision may more definitely prevent the dumping of sewage sludge, cesspool - septic tank pumpings or industrial wastes of a biological nature.

Furthermore, provisions should be made for the control of disease vectors including rodents and flies.

Very truly yours,

BUREAU OF SANITARY ENGINEERING
E. A. REINKE, CHIEF

By J. A. Harmon
Judson A. Harmon
Supervising Sanitary Engineer

JAH:mc
cc: Co. Health Dept.

51-2

March 12, 1951

Mr. David Willets
Division of Water Resources
Room 803, California State Bldg.
217 West First Street
Los Angeles 12, California

Subject: Bak Disposal Company
File No. 51-2

Dear Mr. Willets:

In accordance with request of Mr. Don McKillop, we are enclosing herewith a print of sketch showing location of the Bak Disposal Company.

Very truly yours,

LINNE C. LARSON, Executive Officer

By_____
Matthew G. Eggett
Asst. Executive Officer

MGE:lf
encl.

51-2

March 5, 1951

Mr. C. E. Arnold
County Engineer and Surveyor
725 Los Angeles Co. Engineering Bldg.
108 West Second Street
Los Angeles 12, California

SUBJECT: Bak Disposal Company -
Amendment of Industrial Waste Permit
Our File No. 51-2

Dear Mr. Arnold:

Reference is made to your letter of January 3, 1951, with enclosures and to discussion with you and Mr. A. Pickett on this subject on March 2, 1951.

To briefly review our conversation: It was noted in the aforementioned enclosures that the dump operator is presently cutting to elevation 1 or 2 at which point ground water is encountered. Your geologic information indicates that the dump site is underlain by a thick clay deposit and therefore no depth limitations were imposed.

At the request of the Regional Board, the State Division of Water Resources has submitted a technical report. A copy of the Division's report is attached in which you will note reference to the useable water-bearing aquifer identified as the Pleistocene semi-perched water-bearing zone, as well as other and more important aquifers which underlie the dump site.

In consideration of our mutual interests in such matters, we shall be pleased to attend a meeting of the Industrial Waste Committee, in company with a representative of the Division of Water Resources, to further discuss this matter.

Very truly yours,

LINNE C. LARSON, Executive Officer

By_____
Matthew G. Eggett
Asst. Executive Officer

MGE:lf
encl.

D. EDMONSTON
WARD HYATT, STATE ENGINEER
CHIEF OF DIVISION

EARL WARREN
GOVERNOR OF CALIFORNIA

51-2

C. H. PURCELL
DIRECTOR

Report Rec 2-28-51

9 copies made 3/5/51 L.F. Sencil

STATE OF CALIFORNIA
Department of Public Works
LOS ANGELES

M. G. EGGETT
MAR 1 - 1951

ADDRESS REPLY TO
DIVISION OF WATER RESOURCES
803 CALIFORNIA STATE BLDG.
LOS ANGELES 12

February 27, 1951

L. C. LARSON
FEB 2 1951

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
FEB 28 1951
LOS ANGELES

Mr. Linne C. Larson, Executive Officer
Regional Water Pollution Control Board No. 4
541 South Spring Street
Los Angeles 13, California

Attention Mr. Matthew G. Eggett

Dear Sir: Subject: Bak Disposal Co. Dump Site

Reference is made to your letter of January 31, 1951 regarding application of the Bak Disposal Company who operate a cut and cover dump at 19200 South Main, Los Angeles County, California.

Investigation reveals that the subject company has been operating a dump at this site since shortly after July 1, 1948, receiving, with the exception of garbage, domestic and industrial waste of all types.

This dump is situated on undifferentiated upper Pleistocene deposits which are permeable and contain a useful water-bearing aquifer known as the Pleistocene semi-perched water-bearing zone, a free water table.

This office has records of a large number of wells in the vicinity of the dump site which obtain their water from this zone. Inspection of analyses of these wells indicate that generally this water is of good quality, with chloride ion content approximately equal to or less than 100 PPM and total dissolved solids between 700 and 800 PPM. Dominguez slough which borders one side of this dump showed a chloride ion content of 50 PPM and total dissolved solids of 292 PPM on January 25, 1951. From this it appears that the ground and surface waters in this area are of such quality that they may be readily used for most purposes.

Inspection of the water levels of the wells pumping from the upper pleistocene zone in this vicinity indicates that these water levels are below sea level for long periods of time. It is noted in enclosure 2 to your request dated January 31, 1951 that the water level at the dump site is approximately 1 to 2 feet above sea level. From this it seems that any water polluted at this dump site could readily and adversely affect the wells pumping from this zone.

The Bak Disposal Company Dump Site is underlain by three of the most important water-bearing zones in the West Coast Basin, the 200-ft. gravel, the 400-ft. gravel and the Silverado water-bearing zone. While these three aquifers are called pressure aquifers, water levels in these zones are considerably below sea level. Under present conditions of overdraft these water levels may be expected to decline and thus favor movement of ground waters from surface and upper zones to the highly productive aquifers of the lower zones.

In view of the above this office recommends:

1. That dumping beneath the elevation of 5 feet above sea level be restricted to inert materials such as listed below:

Clean earth
Rock, sand and gravel
Concrete
Brick
Plaster, and
Other similar solid materials not subject to the leaching action of water.

2. That no toxic or highly pollutional substances be accepted for disposal at this site. A partial list of toxic or highly pollutional substances would include:

Liquid or water soluble organic industrial wastes
Oils, fats and greases
Tank bottoms from the storage of crude oils
Contaminated and/or polluted oil well drilling muds
Toxic salts of metals
Creosote or phenolic compounds
Paints and varnishes
Drugs and medicines
Brines
Caustics
Waste acids
Acid sludges

3. That no waste material, except as noted in Recommendation (1) above, be dumped within 200 feet of the channel of the Dominguez slough.

Very truly yours,

A. D. EDMONSTON, STATE ENGINEER

By Max Bookman
Max Bookman
Supervising Hydraulic Engineer

DBW:mu
cc: Harvey O. Banks
Paul Ward
Robert Paul

51-2

STATE OF CALIFORNIA
SACRAMENTO 5

REGIONAL WATER POLLUTION CO
MAR 1 1951
LOS ANG

Inter-Departmental Communication

L C. LARSON
MAR 1 - 1951

To: Regional WPC Board No. 4
541 South Spring St.
Los Angeles 13, California

Attention: Linne C. Larson, Executive Officer

File No. 282.41-Item 4

Date: Feb. 26, 1951

Subject: Bak Disposal Co., Application for Amendment of Industrial Waste Permit.

M. G. EGGETT
MAR 2 - 1951

From: **Division of Water Resources**

This will acknowledge receipt of your letter of January 31, 1951 (your file No. 51-2), requesting that the Division of Water Resources make necessary field investigations to determine possible pollution as a result of operations of Bak Disposal Company, prepare a report and make recommendations.

An investigation will be started at once and a report submitted as soon as possible.

A. D. EDMONSTON, STATE ENGINEER

By Harvey O. Banks
Harvey O. Banks
Supervising Hydraulic Engineer

GBG:gw
cc: Division of Fish & Game
Bureau of Sanitary Engineering
State WPC Board
DWR, Los Angeles

M. G. Eggett

51-2

C. E. ARNOLD
COUNTY ENGINEER
COUNTY SURVEYOR

OFFICE OF
COUNTY ENGINEER AND SURVEYOR
725 LOS ANGELES COUNTY ENGINEERING BUILDING
LOS ANGELES

COPY (5)

L. C. LEASON
FEB 27 1951

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4
FEB 23 1951
LOS ANGELES

February 20, 1951

Mr. Ben K. Kazarian
401 Bankers Building
629 South Hill Street
Los Angeles 14, California

Bak Disposal Company
(I-416)

M. G. EGGETT
FEB 26 1951

Attention: Mr. Maynard B. Henry

Dear Sir:

Your request to have certain conditions of Industrial Waste Permit No. 31 revised has been considered by the Industrial Waste Committee. The Conditions and Limitations attached to your Industrial Waste Permit No. 31 are hereby amended as follows:

Condition No. 1 - deleted

Under present conditions the existing fence is considered adequate. However, if in the opinion of the County Engineer this fence does not prove adequate in the future, this permit will be amended to require a more suitable fence.

Condition No. 9 shall read

Final elevation of filled ground shall not exceed 22 feet U.S.G.S. datum.

Condition No. 13 - deleted

Under present conditions a barricade type fence is not considered necessary. If future conditions should require such a fence the permit will be amended at that time.

Condition No. 17 & 19

The permittee has complied with these conditions and may utilize and fill allland up to the flagged line as shown on map submitted with request.

Yours truly,

C. E. ARNOLD, County Engineer
and Surveyor

By R. L. Gregory
R.L. Gregory
Chief Deputy

WBB:pm

cc-M.G.Eggett

FILE 51-2
2-5-51
32461 8-50 2M SPO

STATE OF CALIFORNIA

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

MEMORANDUM:

To: F I L E S **Date:** 2-5-51

From: Matthew G. Eggett

Subject: BAK DISPOSAL CO. - Application for amendment of Industrial Waste Permit

1. Mr. E. J. Zielbauer, County Flood Control District, was contacted relative to the subject disposal. Mr. Zielbauer was particularly asked about the effects of cutting to ground water for disposal.
2. Mr. Zielbauer implied that he did not favor disposing to ground water; however, this water was semi-perched and was not in hydraulic continuity with the true ground water of the area. The true ground water is of excellent quality, appearing mainly in the aquifers known as the "400 foot gravel" and the "Silverado Zone." Other aquifers present are difficult to define. The site is underlain by recent sediments which are predominantly clay, having minor irregular lenses of sands and clays. Percolation is relatively slow. Only one well draws from above 60 feet which would thereby be producing from one of the minor aquifers. This well indicates water is there present also in good quality. Records on this well, which is located 1575 feet east and 500 feet south of the intersection of Main and South Broadway, shows a log of zero to 18 feet, blue clay; 18 feet to 41 feet, grey sand; 41 feet to 82 feet, clay.
3. A technical report has been requested of the Division of Water Resources.

M. Eggett

Matthew G. Eggett

MGE:lf

Request for Report from Pub Wks (WR), F+G, Pub Health 1-31-51

51-2

January 31, 1951

Mr. A. D. Edmonston, State Engineer
Department of Public Works
Division of Water Resources
P. O. Box 1079
Sacramento 5, California

SUBJECT: Bak Disposal Co. - Application for amendment to Industrial Waste Permit
Our File No. 51-2

Attention: Mr. Harvey O. Banks

Dear Sir:

Application has been made to the County of Los Angeles, Department of Engineer and Surveyor, for revision of certain of the conditions and limitations contained in County Industrial Waste Permit No. 31.

Enclosed herewith is a copy of a letter from the attorney for the subject company, copy of excerpts from County Engineer's memo on this subject, and a copy of Industrial Waste Permit No. 31. We call your attention in particular to items No. 3, 10, and 17. One copy of a detailed map of this disposal site is available at this office for your use at your convenience.

Pursuant to provisions contained in Division 7 of the Water Code, and in accordance with procedures outlined in the Inter-Departmental Communication from the Director of Finance to the Directors of Public Works, Public Health, and Natural Resources dated June 19, 1950, Regional Water Pollution Control Board No. 4 requests the following technical assistance:

> Make necessary field investigations to determine possible pollution as a result of this operation, together with a report and recommendations for the protection of the waters of the State involved in this operation.

In accordance with procedures established by the coordinating committee, it is requested that this report be reviewed by the Division of Fish and Game and the Department of Public Health for their concurrence and/or recommendations they care to make relative to their interests involved in this operation.

Very truly yours,

LINNE C. LARSON
Executive Officer

By_____
Matthew G. Eggett
Asst. Executive Officer

MGE:lf
cc: Paul Ward
Robt. Paul
David Willets
encls 3

BAK DISPOSAL COMPANY (I-416)
Between Main Street & Avalon Boulevard
and 190th Street & Del Amo

- : -

Ordinance 614 N.S., Permit No. 31

REGIONAL WATER POLLUTION CONTROL BOARD
JAN 9 1951
LOS ANGELES

Conditions and Limitations:

1. That a 5 strand barb wire fence at least 6 feet in height be constructed around the property.

2. That a trained operator with the proper equipment be on duty at all times when dumping operations are in progress.

3. That strict regulations be observed to prevent the dumping of garbage and certain industrial wastes, particularly toxic chemicals, acid or caustic sludge, or similar objectionable substances.

4. Upon request of the operator, the County Engineer will approve a list of materials which may be dumped. No other materials shall be accepted.

5. Small dead animals shall be buried at once at least 3 feet below the ground surface in accordance with the requirements of the County Health Officer. No large dead animals shall be accepted.

6. That each trench before filling, be rough graded so as to provide drainage towards the proposed Dominguez Channel.

7. That each day's fill be covered with clean earth, and that the top covering of the filled area be made with at least two feet of clean earth.

8. That the operator of the dump be required to post bond of $25,000 with the Board of Supervisors to guarantee satisfactory operation.

9. That the final elevation of the filled ground be at least two feet above adjacent street grades.

10. That all wells within the dump area must be properly safeguarded, and that provisions be made for sealing such wells with concrete before abandonment.

11. That representatives of interested County departments be permitted access at any time when dumping operations are in progress to take samples and inspect the operation.

12. That dump operators post a deposit sufficient to cover the cost of periodic sampling and analysis of any suspected materials or of any liquid waste from the filled area.

13. A barricade-type fence shall be provided to prevent blowing of papers and unsightly conditions adjacent to the dumping operations.

14. The ground shall be wet down at frequent intervals to control dust.

15. In the event of rodent infestation, regulations and requirements of the Health Officer shall be immediately invoked.

16. Provisions for adequate water supply, pipe lines, hydrants and hoses to cope with possible fires created accidentally or by spontaneous combustion of buried materials shall be approved by the County Engineer.

17. That before utilization of the areas below elevation 15.5, the operators shall consult with the Chief Engineer of the County Flood Control District and cooperate in working out a program of development and channel enlargement which will not adversely affect adjacent and downstream property owners or other interests because of increased flood hazards.

18. That right of way requirements of the Flood Control District for the relocation of Dominguez Channel through the subject area be recognized and that no operations be carried on within said proposed right of way, or within existing rights of way except upon permission of the Chief Engineer of the County Flood Control District.

19. That the operators make adequate provision for the passage of all drainage waters through the subject area and protect all surface exposed to running water to prevent washing of dumped materials to downstream areas and into the Los Angeles Harbor.

20. That where possible, the operators secure material needed for covering rubbish fills, by excavation of the Dominguez Channel on its new location, and that they shall not encroach upon the existing channel with disposal operations until a new and adequate channel is completed.

WBB:es
7-1-48

51-2

County of Los Angeles

DEPARTMENT OF
County Engineer and Surveyor
725 LOS ANGELES COUNTY
ENGINEERING BUILDING
108 WEST SECOND STREET
Los Angeles 12, California

MUtual 9211

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4 JAN 9 1951 LOS ANGELES

C. E. ARNOLD
COUNTY ENGINEER
COUNTY SURVEYOR

R. L. GREGORY
CHIEF DEPUTY

January 3, 1951

IN REPLY PLEASE REFER TO:
Bak Disposal Company
(I-416)

L. C. LARSON
JAN 9 - 1951

Mr. Linne C. Larson, Executive Officer
State of California
Regional Water Pollution Control Board No. 4
5th Floor Spring-Arcade Building
Los Angeles 13, California

Attention: Mr. Matthew Eggett

M. G. EGGETT
JAN 15 1951

Subject: Amend Industrial Waste Permit - Ordinance No. 614
Industry: Bak Disposal Company (I-416)
19200 S. Main St., Los Angeles

Dear Sir:

In accordance with the procedure established for the handling of Industrial Waste Disposal permits between your office and the Industrial Waste Division, we are enclosing herewith:

(1) A copy of a letter from Ben K. Kazarian asking that Conditions #9, 17 and 19 of their Industrial Waste Permit No. 31 be amended.

(2) An excerpt from an memorandum regarding a conference held in the County Engineer's department. This memorandum helps clarify Mr. Kazarians letter. (enclosure-one)

(3) A copy of the Conditions and Limitations which were attached to Permit No. 31.

(4) A map showing the location of the flag line mentioned in their letter. (enclosure-one)

This application will be discussed at an Industrial Waste Committee meeting in the near future. We request that you contact all State agencies which in your opinion will be concerned with this proposed operation and, if possible, secure commitments from them which will enable you to take any action necessary.

Yours truly,

C. E. ARNOLD
County Engineer and Surveyor

By R. L. Gregory
Robert L. Gregory, Chief Deputy

WJC:pm
Encls.

Requirements
B.K.K. Public Dump File: 51-2

Division 7 of the Water Code of the State of California, prescribes the following requirements for the disposal of wastes at this waste disposal facility owned and operated by the B.K.K. Company, Inc., subject to the provisions of Section 13054 of said Water Code which reads in part that "Requirements may be reversed from time to time":

A. No wastes other than solid inert fill shall be deposited below elevation +5 feet U.S.C. and G.S. Sea Level Datum of 1929. Inert solid fill is defined as nonwater soluble, nondecomposable, inert solids of the nature below:

1. Natural earth
2. Rock, sand, and gravel
3. Paving fragments
4. Concrete
5. Brick
6. Plaster and plaster products
7. Steel mill slag
8. Glass
9. Ashestos fibre and products therefrom
10. Street sweepings collected by the County or municipalities during established street cleaning operations and brought to the site in the public agencies' vehicles provided said sweepings contain not less than 80% by volume of solid inert materials.

B. Only the following listed materials shall be deposited above an elevation of +5 feet U.S.C. and G.S. Sea Level Datum of 1929.

a. Solid material defined as ordinary household and commercial refuse and/or rubbish, garbage, other decomposable organic refuse, and scrap metal of the nature indicated below:

1. Metals and metal products except magnesum and its alloys and salts.
2. Paper and paper products including roofing and tar paper.
3. Cloth and clothing
4. Wood and wood products
5. Lanw clippings, sod and shrubbery
6. Small dead animals
7. Unquenched ashes mixed with refuse
8. Manufactured rubber products
9. Solid plastic products
10. Small quantities of noxious materials in mixed loads of rubbish.

11. Oil soaked excelsior or straw used to absorb hydrocarbon oils from waste water.
12. Dried mud cake from oil field sumps
13. Residue and grit from separation chambers from the Hyperion Sludge Plant provided that:

    (1) This material must be covered immediately.
    (2) Such steps as are necessary be taken at all times in order to prevent fly breeding or odor nuisance.

14. All solid inert materials listed in Section A, above.

b. Semi-liquid wastes as listed below:

1. Rotary drilling mud from oil field drilling operations.
2. Cleanings from production tanks. Cleanings from production tanks are defined as the residues removed in the cleaning of tanks used solely for the production and storage of unrefined petroleum. Tank cleanings does not include any substance derived from the cleaning of tanks used in connection with oil refining, storage of oil refinery wastes or other refined petroleum products.
3. Paint sludge recovered from water circulated in paint spray booths.
4. Acetylene sludge
5. Sludge from automobile wash racks and steam cleaning plants.
6. Mud and water from laundries.
7. Liquid latex wastes.
8. Ceramic, pottery, and glaze wastes
9. Lime and soda water.

All of the above semi-liquid wastes shall be limited in quantity to 10 gallons for each cubic yard of concurrently accepted uncompacted materials as listed in above paragraph "a". Semi-liquid wastes so received shall be immediately mixed with the materials listed in the above paragraph "a" and shall be confined to such materials in such a manner as to prevent run-off or discharge to adjoining areas.

All semi-liquid wastes received shall be accounted for by adequate records kept by the operator of the dump site, including certifications

Copied for agenda meeting 3-8-51 17.

MAYNARD B. HENRY

Attorney at Law
401 Bankers Building
629 South Hill Street
Los Angeles 14, Calif.

TRinity 5468

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4 LOS ANGELES
JAN 9 1951

December 21, 1950

Mr. Arthur Pickett
Industrial Waste Engineer
County Engineer's Office
108 West Second Street
Los Angeles 12, California

Dear Mr. Pickett:

Subject: Industrial Waste Disposal Permit, Ordinance #614NS

File: Bak Disposal Company, I-416

Pursuant to the conference held recently among you, representatives of the Los Angeles Flood Control District, and others from your office, together with representatives of permitee, under Special Permit Case #537, and Industrial Waste Permit #I-416, relative to the conditions attached to the said Industrial Waste Permit issued to permitee on July 1, 1948, I am submitting the following suggestions re future operations of the permitee:

Specifically referring to condition #9, I request that the same be amended so as to allow the extension of the present final grade as now established in the area.

Re conditions #17 and #19, I feel that permitee has fulfilled the requirements contained therein as a result of the conference heretofore mentioned, and that the program worked out at that conference is acceptable to the permitee. I make reference to the enclosed and attached maps indicating a flagged line intersecting with Dominguez Channel and extending generally in a Northerly direction up the adjacent channel. It is the desire of permitee to utilize and fill all land up to the flagged line. This will, at all times, leave sufficient channel to the East thereof to allow a rapid flowoff of upchannel waters.

It is respectfully requested that the conditions of the said permit be amended with the foregoing.

Very truly yours,
BEN K. KAZARIAN
/s/ Maynard B. Henry
By MAYNARD B. HENRY, His attorney

MBH:mm
Encl.

REGIONAL WATER POLLUTION CONTROL BOARD
JAN 9 1951
LOS ANGELES

Excerpt from County Engineer's
Memorandum

To: Mr. J. L. Partin
From: Mr. B. R. Matthiesen
File: BAK DISPOSAL CO. (D-824-1) (I-416)
19200 S. Main St.
Date: December 7, 1950

In a conference held in Mr. Pickett's office on December 5, 1950, matters pertaining to the operation of this dump were considered.

The Industrial Waste Division was represented by Mr. A. G. Pickett and Mr. B. R. Matthiesen.

The Flood Control District was represented by Mr. A. B. Collins.

The Bak Disposal Company was represented by Mr. Ben Kazarian, operator and Mr. Maynard Henry, attorney for Mr. Kazarian.

The principal discussion was about Item #17 which requires the dump operators to cooperate with the Flood Control District and work out a program in developing the channel enlargement prior to operatingin areas below elevation 15.5.

It developed in the course of the conversation that the Flood Control District is not actually interested in the development of that small channel east of Main Street and coming down from the north. The District was assuming that the County Engineer's Department was involved in the matter of future storm drains to be built in this channel and were concerned that proper connections be made with the Dominguez Channel. The Storm Drain Division was contacted and we were assured by Mr. L. B. Knox that no plans for the construction of a storm drain in that waterway are anticipated.

Therefore, since the property owners would be the interested party, it was agreed that Mr. Henry and they should work out a channel location satisfactory to both parties and when this is done a row of stakes will be set along the location and the dumping operations will be held a reasonable distance (50' was considered adequate) westerly of these stakes.

The matter of maximum fill height was discussed and it was agreed that the fill should not exceed elevation 22'. In consideration of the fact that the area is underlaid by a thick clay deposit, it was agreed that no depth limits should be imposed. Presently they are cutting to elevation 1 or 2 at which point ground water is encountered. It is their intention to cut in most cases until ground water is reached, therefore, the depth will vary somewhat with the season.

51-2

REGIONAL WATER POLLUTION CONTROL BOARD NO. 4

August 10, 1950 FILE NO. 50-13X

8-10-50

SUBJECT: Los Angeles Old Incinerator SiteX
Cross Reference: Bak Dump) Dumps in the Laguna-Dominguez
Martin Adams DumpX) Area

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1. The two dumps in the Laguna-Dominguez area, as well as the Blanchard Street Dump, were those which Mr. Pickett advised could accept waste acids for disposal.

2. Although these dumps are not ideal for disposing of industrial wastes, they were selected because of their proximity to the highly industralized Laguna-Dominguez area, and because of the necessity for centralizing the disposal of industrial waste. These dumps are adjacent to the Dominguez channel which from Main Street to the ocean acts essentially as an industrial waste channel. Although the channel itself, because of the continued disposal of wastes, is well sealed off, the area ~~itself~~ adjacent to the channel may be considered partially permeable, although relatively tight. Refineries in this immediate vicinity use this channel for the disposal of much of their industrial wastes. The underground formation is predominately clay, and thus may effectively confine acids disposed of at these dumps. North, however, of these dumps is an area where cattle graze, and any toxic materials which may move along the profiles and lie stagnant could result in the poisoning of these cattle.

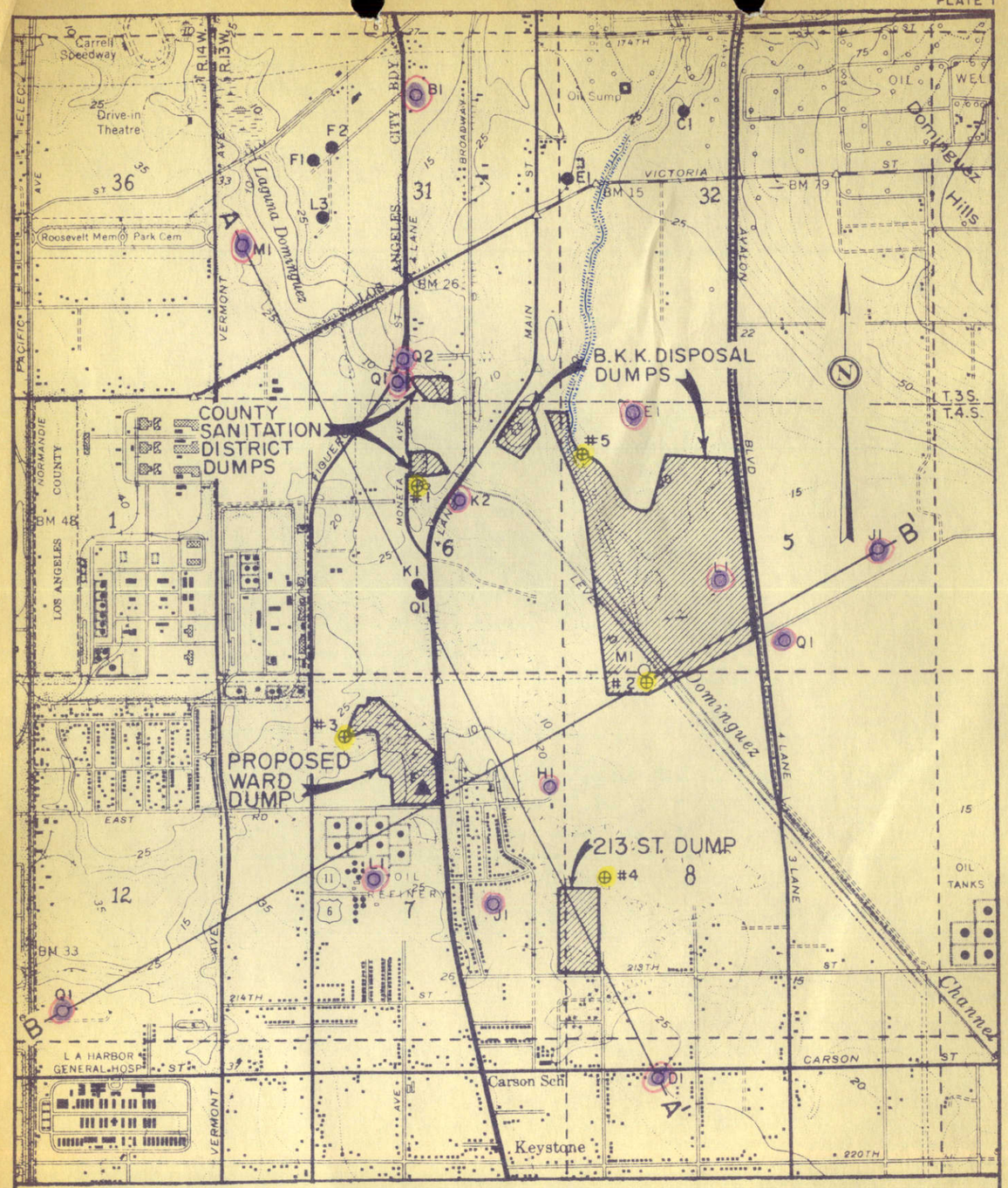
3. Mr. Zielbauer of the Los Angeles County Flood Control District advises that this channel is effectively sealed off in its main portions, but there is some permeability along the lower regions. South of the Dominguez Gap, there is semi-perched water and also old deep wells which could allow the transfer of pollution from the semi-perched water to the underground water basin. To the west of the Laguna-Dominguez area there are water producing wells. The underground basins are the 200 ft. sand which underlies the general area, the 400 ft. gravel which does not extend into the Laguna-Dominguez area but does reach into the vicinity of Gardena, and the Silverado Zone.

Mr. Zielbauer mentions the particular hazard in regard to the possibility of underground fires resulting from the disposal of industrial wastes. In comparing the Laguna-Dominguez area with the Blanchard Street Dump area, Mr. Zielbauer states that he does not feel that the Laguna-Dominguez area is as safe for the disposal of industrial wastes.

Matthew G. Eggett

MGE/lf

PLATE 1



LEGEND

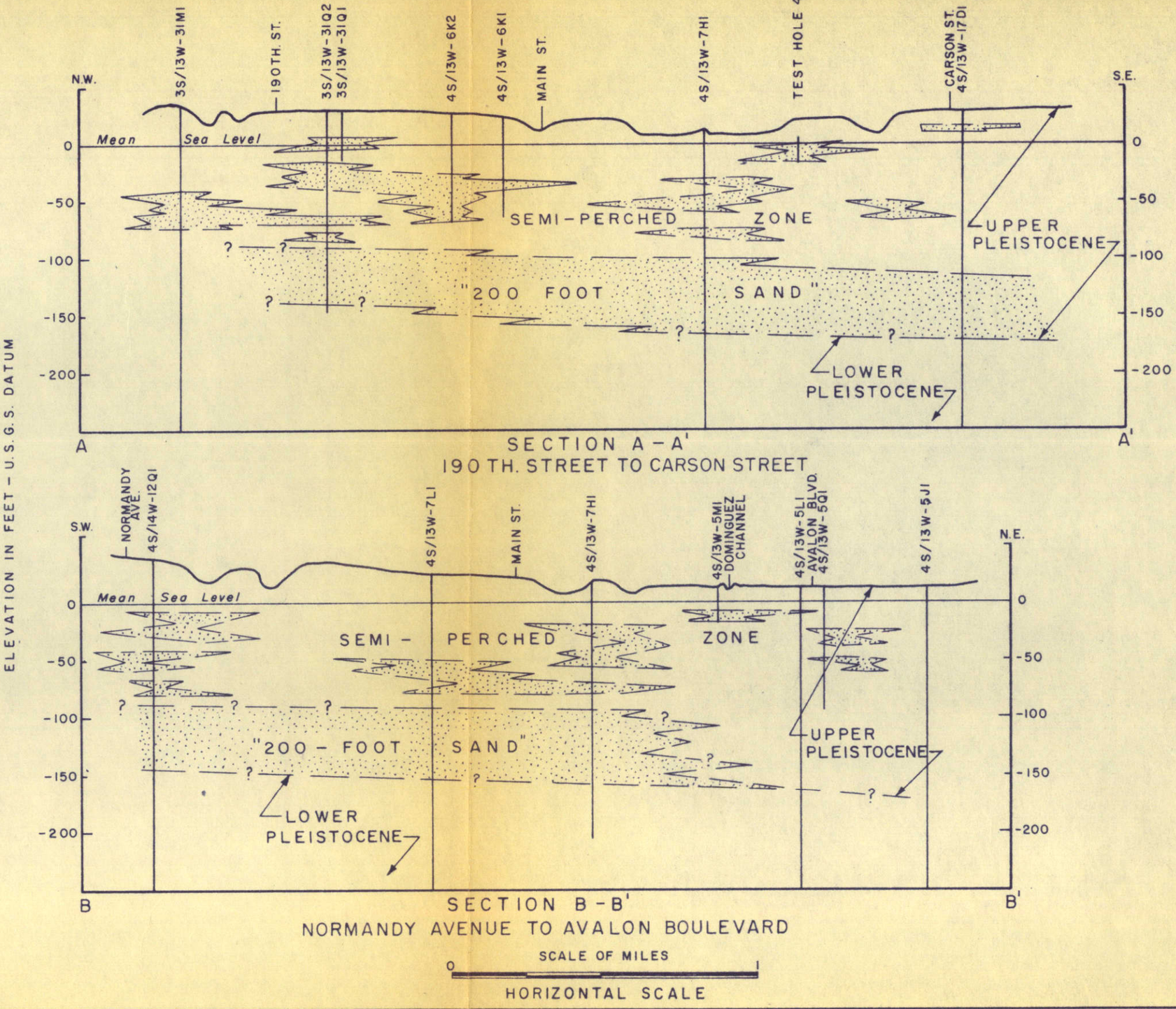
- ⊕5 TEST HOLE
- ○MI WATER WELL, ABANDONED OR PRODUCING FROM DEEP AQUIFERS
- ●QI WATER WELL, PRODUCING FROM SHALLOW AQUIFERS
- F▲ SURFACE WATER SAMPLE

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

DISPOSAL AREAS IN THE VICINITY OF LAGUNA DOMINGUEZ

VICINITY MAP

SCALE OF MILES
0 1/4 1/2

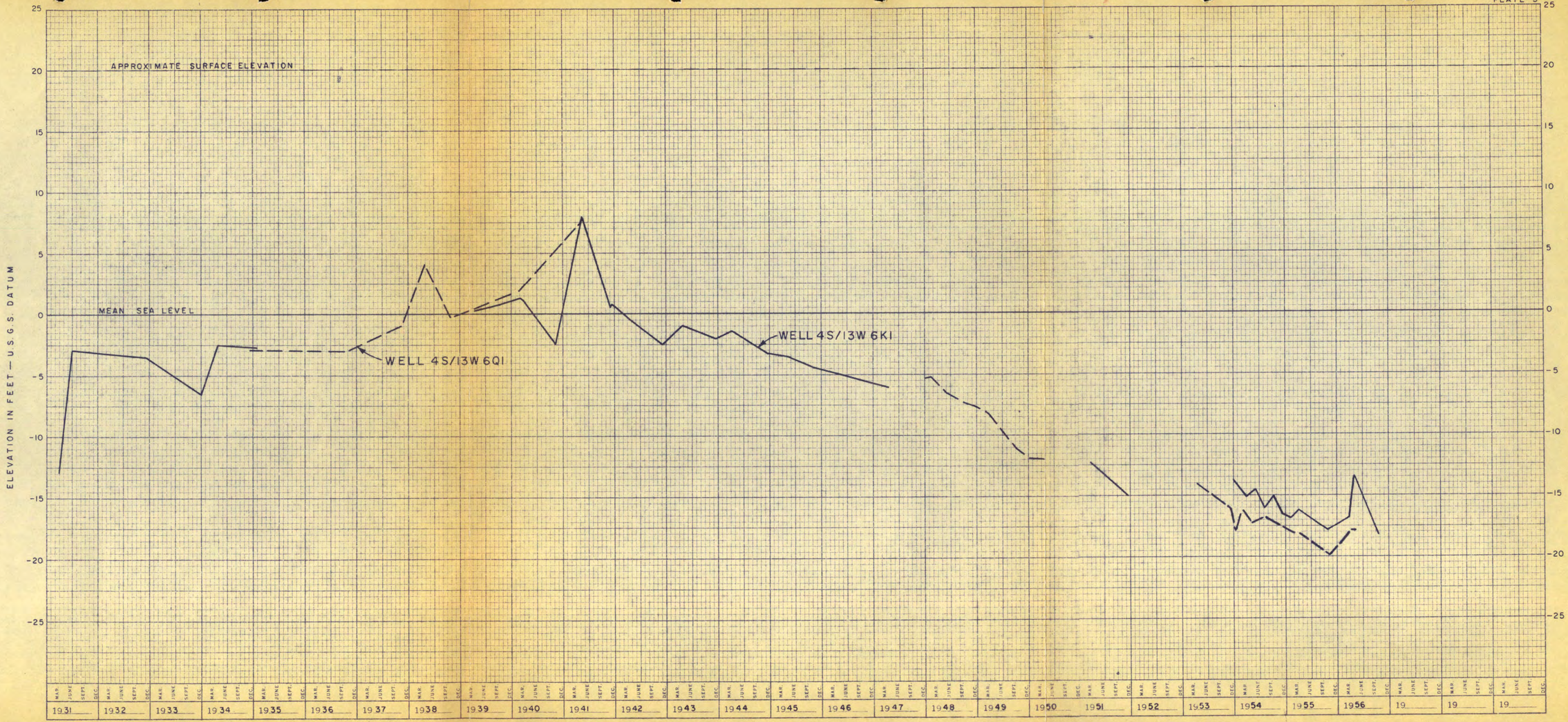


GENERALIZED GEOLOGIC SECTIONS

DISPOSAL AREAS NEAR LAGUNA DOMINGUEZ

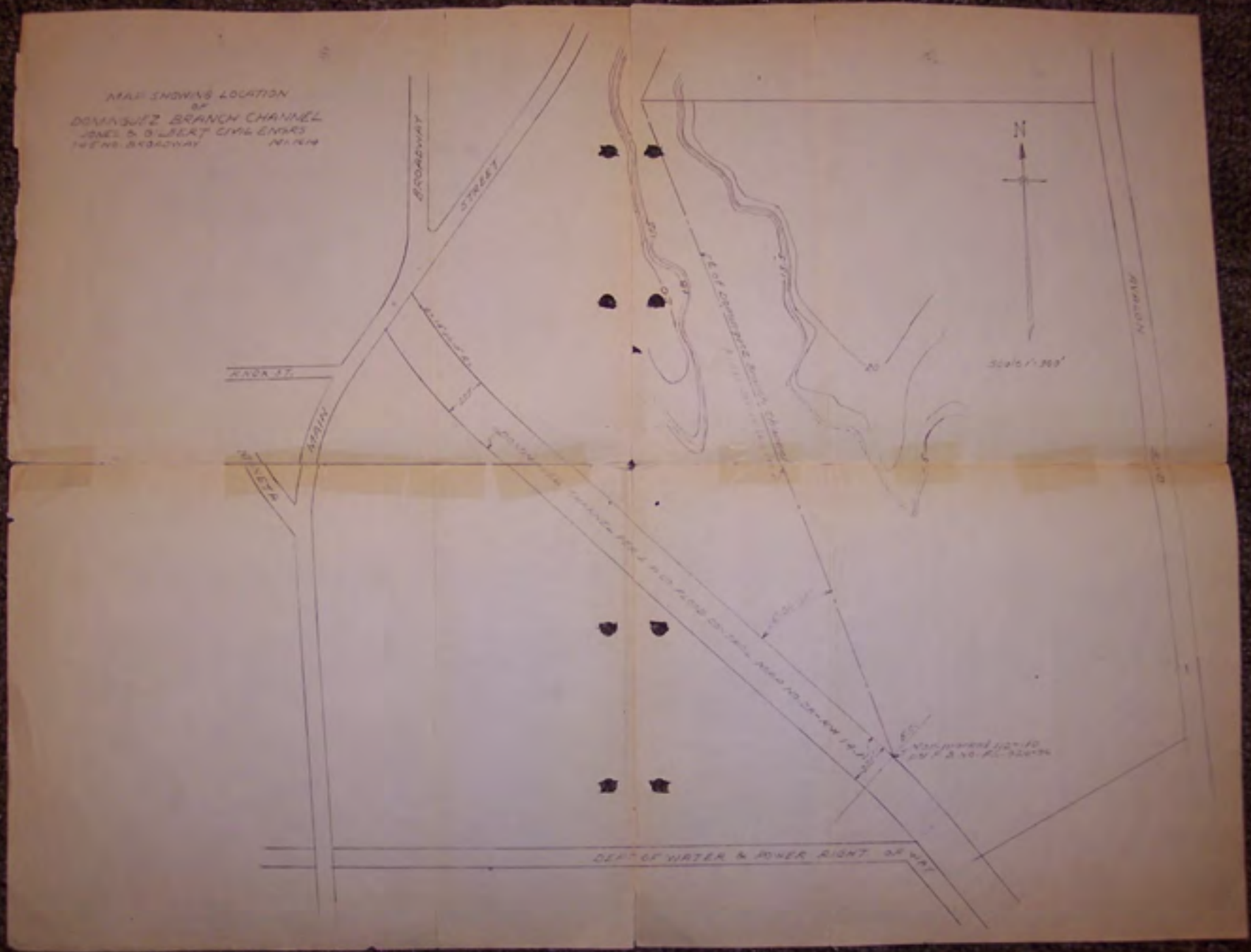
DEPARTMENT OF WATER RESOURCES

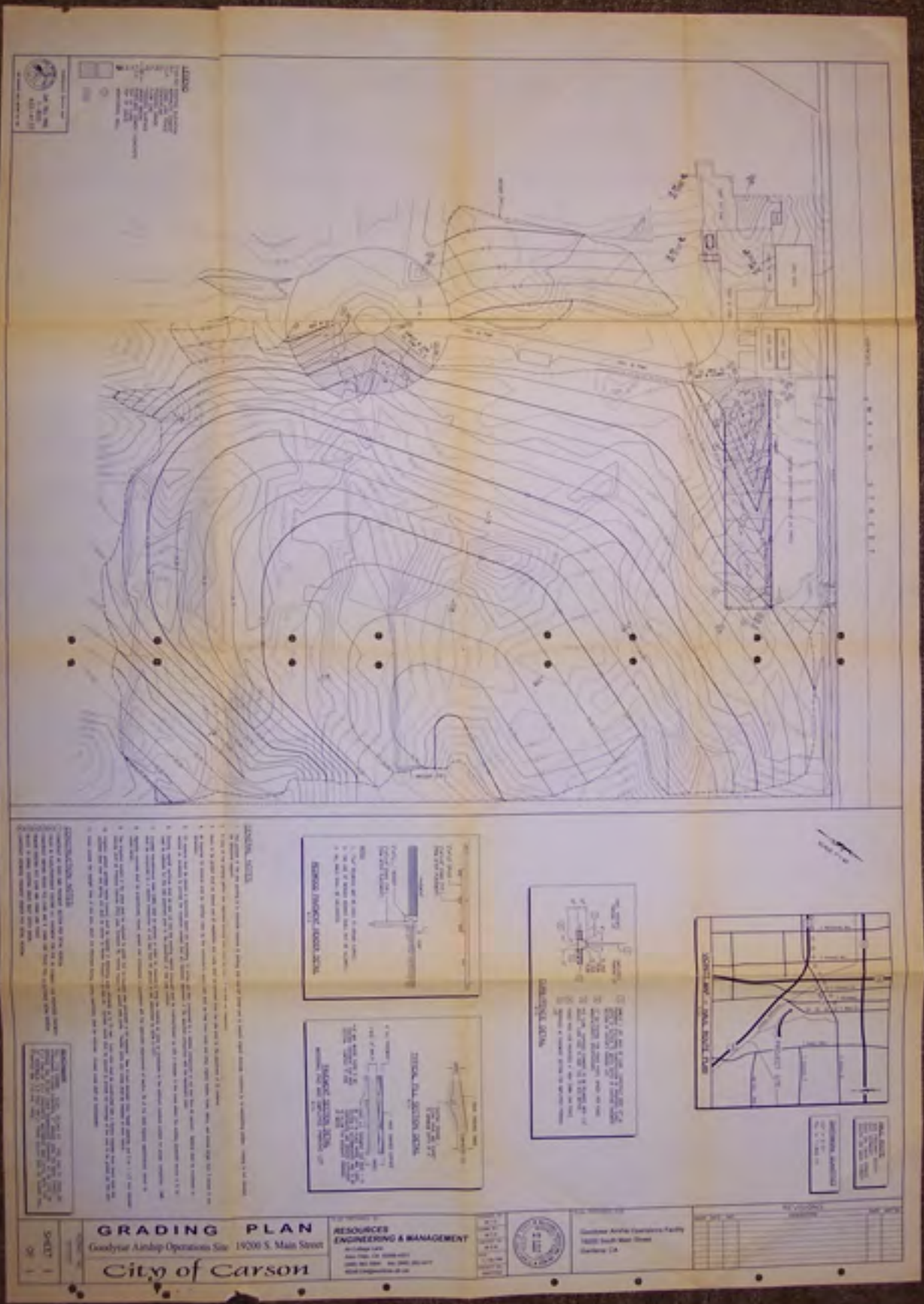
PLATE 3



FLUCTUATION OF WATER LEVELS IN WELLS NEAR LAGUNA DOMINGUEZ

K&E 20 YEARS BY MONTHS 359-210L
X 110 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.


MAP SHOWING LOCATION
OF
DOMINGUEZ BRANCH CHANNEL
JONES & GILBERT CIVIL ENGRS
BROADWAY
STREET
MAIN
N
Scale 1" = 300'
DEPT OF WATER & POWER RIGHT OF WAY

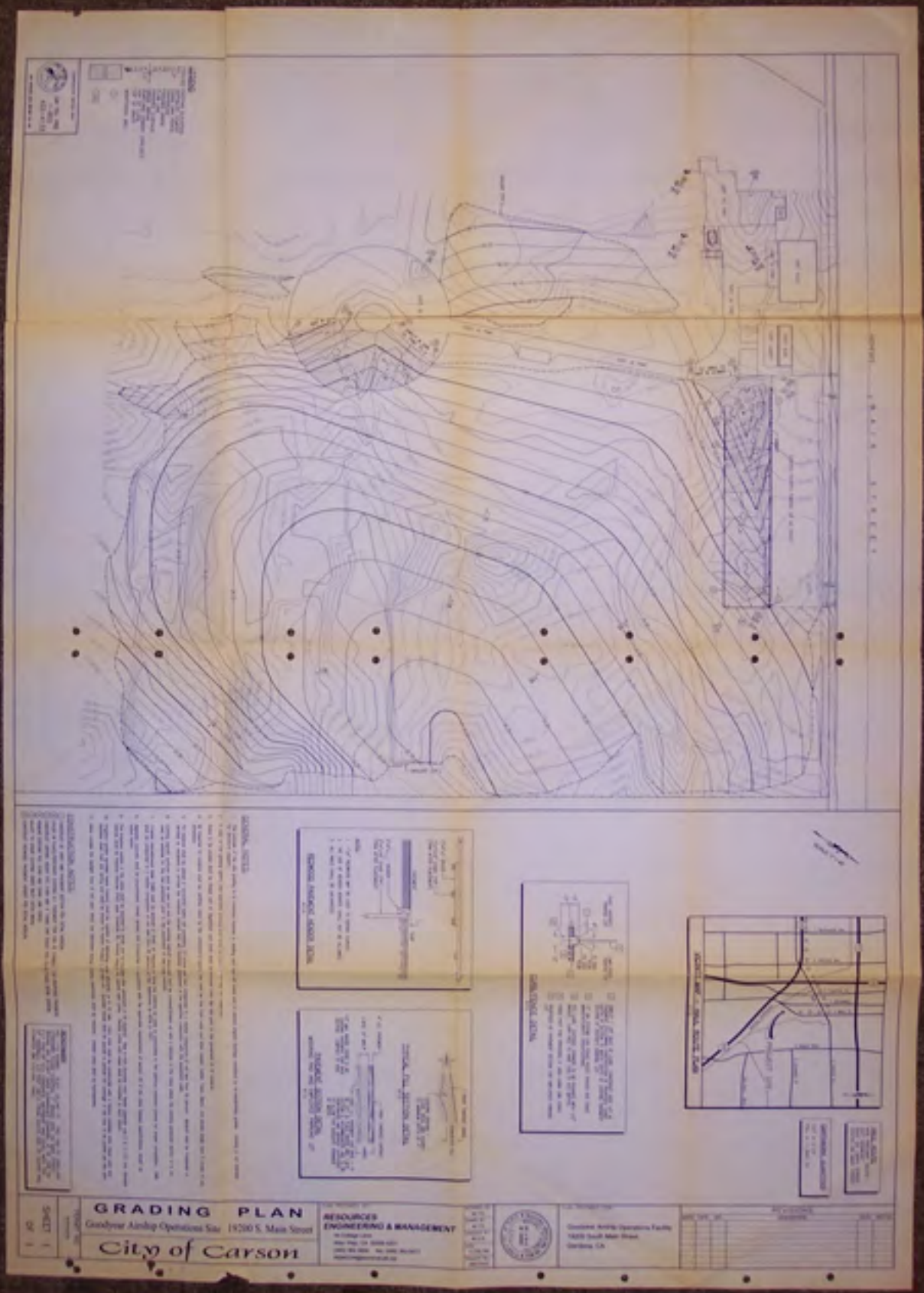


GRADING PLAN

Goodyear Airship Operations Site 19200 S. Main Street

City of Carson

RESOURCES ENGINEERING & MANAGEMENT


GRADING PLAN
Goodyear Airship Operations Site 19200 S. Main Street
City of Carson
RESOURCES
ENGINEERING & MANAGEMENT

Appendix K

Response Obtained from the
United States Environmental Protection Agency – Region IX

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

JUN 1 1 2018

Shannon Castagno
Environmental Support Services
30251 Golden Lantern, #E305
Laguna Niguel, California 92677

Re: Freedom of Information Act Request EPA-R9-2018-008160

Dear Shannon Castagno:

This is in response to your Freedom of Information Act request regarding:

340 East 192nd Street aka 340 M.L.K. Jr. Street aka 19200 South Main Street, Carson, CA 90746.

I wish to advise you that Region 9 has no records responsive to your request.

All FOIA related documents, including this letter (invoice if applicable), have been uploaded to EPA's FOIAOnline system found at https://foiaonline.regulations.gov/foia/action/public/home. Please be sure to reference your FOIA request as EPA-R9-2018-008160 to access this record.

This letter concludes our response to your request. You may appeal this response by email at hq.foia@epa.gov, or by mail to the National Freedom of Information Office, U.S. EPA, 1200 Pennsylvania Avenue, N.W. (2822T), Washington, DC 20460 (U.S. Postal Service Only). Only items mailed through the United States Postal Service may be delivered to 1200 Pennsylvania Avenue, N.W. If you are submitting your appeal via hand delivery, courier service, or overnight delivery, you must address your correspondence to 1301 Constitution Avenue, N.W., Room 6416J, Washington, DC 20004. Your appeal must be made in writing, and it must be received no later than 90 calendar days from the date of this letter. The Agency will not consider appeals received after the 90 calendar day limit. Appeals received after 5:00 pm EST will be considered received the next business day. The appeal letter should include the FOIA tracking number listed above. For quickest possible handling, the subject line of your email, the appeal letter, and its envelope, if applicable, should be marked "Freedom of Information Act Appeal." Additionally, you may seek resolution services from EPA's FOIA Public Liaison at hq.foia@epa.gov or (202)566-1667, or from the Office of Government Information Services (OGIS). You may contact OGIS in any of the following ways: by mail, Office of Government Information Services, National Archives and Records Administration, Room 2510, 8610 Adelphi Road, College Park, MD 20740-6001; e-mail, ogis@nara.gov; telephone, 202-741-5770 or 1-877-684-6448; and facsimile, 202-741-5769.

The Land Division's RCRA Records Center is maintained by Toeroek Associates Inc., under contract to EPA Region 9. If you have any questions, please contact Colin Lee of Tetra Tech, Incorporated at 415-947-4597.

Sincerely,

Jeff Scott,
Director, Land Division

FOIA Contact Information for State Offices
Region IX

Arizona

Arizona Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007
Phone: (602) 771-4380

California

California EPA
Department of Toxic Substances Control
1001 I Street
P.O. Box 806
Sacramento, CA 95812-0806
Phone: (916) 322-0476

Hawaii

Hawaii Department of Health
Solid and Hazardous Waste Branch
919 Ala Moana Boulevard, Room #212
Honolulu, HI 96814
Phone: (808) 586-4226

Nevada

Department of Conservation & Natural Resources
Division of Environmental Protection
Bureau of Waste Management
901 South Stewart Street, Suite 4001
Carson City, NV 89701
Phone: (775) 687-9459

Guam

GUAM EPA
P.O. Box 22439 GMF
Barrigada, GU 96921
Phone: +1 (671) 475-1658

Information Management
Public Records Unit

Direct Dial (909) 396-3700
Fax:(909) 396-3330

COMPLETION LETTER

July 20, 2018

SHANNON CASTAGNO
ENVIRONMENTAL SUPPORT SERVICES
30251 GOLDEN LANTERN # #E305
LAGUNA NIGUEL, CA 92677

Ref.: CONTROL NO. 95323
Received 05/31/2018

Re: P/O'S, EQL'S, & NOV'S FOR BKK CARSON DUMP/VICTORIA GOLF COURSE, 340 E 192ND ST, CARSON, CA.

After a thorough search of this agency's records, the following records were found:
P/O'S, EQL & NOV FOR VICTORIA GOLF COURSE, 340 E 192ND ST, CARSON, CA.

The following records were not found:
P/O'S, EQL'S, & NOV'S FOR BKK CARSON DUMP, 340 E 192ND ST, CARSON, CA.

YOUR REQUESTED RECORDS WERE PROVIDED ELECTRONICALLY ON 07/20/2018

If you have any questions, please do not hesitate to contact me, Tuesday through Friday, **8:00 a.m**. to **4:30 p.m.**

Sincerely,

LISA RAMOS x3211
For COLLEEN PAINE
Public Records Coordinator

:lr

PERMIT TO CONSTRUCT/OPERATE

Permit No.
N29965
A/N 581798

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner
or Operator:

VICTORIA GOLF COURSE
340 E. 192ND STREET
CARSON, CA 90746

ID 112037

Equipment Location: 340 E. 192ND STREET, CARSON, CA 90746

Equipment Description:

Fuel Storage and Dispensing Facility Consisting of:

1) 1 - Gasoline Nozzle Dispensing 1 Product, Equipped with Phase II Vapor Recovery System, Balance Retractor (G-70-52-AM).

2) 1 - Dual Compartment Aboveground Gasoline/Diesel Storage Tank, Hoover Lube Cube (VR-301-F), Rectangular, 12' - 0" L. X 6' - 0" W. X 5' - 0" H., 1,500 Gallon Capacity, Consisting Of:

   A) One 1,000 Gallon Gasoline Compartment, Equipped with a Husky 5885 Pressure/Vacuum Relief Valve, and a Morrison Brothers Phase I Enhanced Vapor Recovery (EVR) System (VR-402-C).

   B) One 500 Gallon Diesel Compartment, Not Equipped with Phase I Vapor Recovery System.

Conditions:

SECTION I: GENERAL CONDITIONS

1. Operation of this equipment shall be in compliance with all data and specifications submitted with the application under which this permit was issued, unless otherwise noted below.

2. This equipment shall be properly maintained and kept in good operating condition at all times.

SECTION II: PHASE I VAPOR RECOVERY SYSTEM AND TESTING REQUIREMENTS

3. Except for diesel transfers, Phase I vapor recovery systems shall be in full operation whenever gasoline fuel is being transferred into storage tank.

4. A leak rate and cracking pressure test of pressure/vacuum relief vent valves shall be conducted within ten (10) days after the start of operation of the Phase I EVR equipment and at least once every three (3) years thereafter to determine the pressure and vacuum at which the pressure/vacuum vent valve actuates, and to determine the volumetric leak rate at a given pressure. The test shall be conducted in accordance with the test procedure method TP-201.1E (October 8, 2003). Results shall be submitted to the SCAQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test. This test result shall be kept on site for three (3) years and made available to District representatives upon request.

FILE COPY

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

SECTION III: PHASE II VAPOR RECOVERY SYSTEM AND TESTING REQUIREMENTS

5. Except for diesel transfers, Phase II vapor recovery systems shall be in full operation whenever fuel is being transferred into motor vehicles, as defined in Rule 461.

6. A static pressure performance test shall be conducted to quantify the vapor tightness of the aboveground storage tank. The test shall be conducted in accordance with the latest version of Exhibit 4 of CARB Executive Order VR-402, as a performance test and as a reverification test. Results shall be submitted to the SCAQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

7. The Phase II vapor recovery system shall be installed, operated, and maintained such that the maximum allowable pressure through the system including nozzle, vapor hose, swivels, and underground piping does not exceed the dynamic back pressures described by the California Air Resources Board Executive Order by which the system was certified:

Nitrogen Flowrates (CFH)	Dynamic Back Pressure (Inches of Water)
60	0.35
80	0.62

Dynamic back pressure tests shall be conducted to determine the Phase II system vapor recovery back pressures. The tests shall be conducted in accordance with CARB test procedure TP-201.4 (July 3, 2002), Methodology 1 as a performance test and as a reverification test. Results shall be submitted to the SCAQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

8. If the CARB Executive Order requires the installation of a liquid removal device, a liquid removal rate test shall be conducted to demonstrate the removal of gasoline from the vapor passage of the coaxial hose. The test shall be conducted in accordance with CARB test procedure method TP-201.6 (April 28, 2000) as a performance test and as a reverification test. Results shall be submitted to the SCAQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

SECTION IV: GENERAL REQUIREMENTS

9. All Phase I and Phase II vapor recovery equipment at this facility shall be installed, operated and maintained to meet all California Air Resources Board certification requirements.

10. All permit conditions applicable to the equipment described in the previous Permit to Operate N9217 shall remain in effect until the new or modified equipment is constructed and operated as described in this new permit. This Permit to Construct/Operate shall become invalid if the modification as described in the equipment description has not been completed within one year from the issue date. If the modification has not been completed within one year from the issue date of the permit, a written request shall be submitted to the SCAQMD (Attention: Randy Matsuyama) to reinstate the previously inactivated permit to operate. A new application shall be filed if there are plans to continue with the modification. Furthermore, this condition does not allow any time extensions to any modifications required by the California Air Resources Board or SCAQMD.

11. New equipment installations and subsequent service and repairs for any certified component for which this permit was issued, shall only be performed by a current and certified person who has successfully completed the manufacturer's training course and appropriate International Code Council (ICC) certification. Completion of

any SCAQMD training course does not constitute as a substitute for this requirement. Proof of successful completion of any manufacturer training course shall be with the manufacturer.

12. The District at its discretion may wish to witness the installation and/or performance testing of the new vapor recovery equipment. At least seventy-two (72) hours prior to the installation of the equipment and any of the mentioned testing requirements in this permit, the applicant shall notify the SCAQMD by methods specified at the time by the Executive Officer. Such notification shall include the name of the owner or operator, the name of the contractor, the location of the facility, and the scheduled start and completion dates of the tests to be performed.

13. Unless SCAQMD Rule 461 requires a more frequent testing or inspection schedule, the owner/operator shall be responsible to perform the scheduled weekly, quarterly, and annual inspections as outlined in the CARB approved Installation, Operation, and Maintenance manual for the Morrison Bros. Phase I EVR system, as well as all the required vapor recovery system tests as per the current and appropriate CARB Executive Order.

14. At least seventy-two (72) hours prior to back-filling any underground storage tank or piping, the SCAQMD shall be notified electronically or other means as specified by the Executive Officer. Such notification shall include the name of the owner or operator; the name of the contractors; the location of the facility; and the scheduled start and completion dates of the back-filling procedure. The back-filling procedure shall not commence until inspected by a District representative.

15. The SCAQMD shall be notified electronically or other means as specified by the Executive Officer at least seventy-two (72) hours prior to any of the above mentioned testing requirements. Such notification shall include the name of the owner or operator, the name of the contractor, the location of the facility, and the scheduled start and completion dates of the tests to be performed.

16. The testing for the above mentioned tests shall be conducted in accordance with the most recent Rule 461 amendment or CARB Executive Order requirements, whichever is more stringent.

17. A copy of the pass/fail test results shall be sent electronically or other means as specified by the Executive Officer within seventy-two (72) hours after each test is conducted. Furthermore, the final test results demonstrating compliance shall be submitted electronically or other means as specified by the Executive Officer within fourteen (14) calendar days from the date when all tests were passed. The test report shall include at a minimum all the required records of all tests performed, test data, current SCAQMD facility ID number of the location being tested, the equipment permit to operate or application number, the SCAQMD ID number of the company performing the tests, a statement whether the system or component tested meets the required standards, and the name, SCAQMD tester ID number and signature of the person responsible for conducting the tests.

18. All records and test results that are required to be maintained by Rule 461 shall be kept on site for four (4) years and made available to District representatives upon request.

SECTION V: GASOLINE THROUGHPUT REQUIREMENTS

19. The maximum quantity of gasoline dispensed from the gasoline storage tank at this facility shall not exceed 2,083 gallons in any one calendar month nor 25,000 gallons in any one calendar year.

20. Records of monthly and annual fuel dispensed shall be prepared, shall be retained on site for two years, and shall be made available to District representatives upon request.

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

21. The owner/operator shall submit the facility's monthly gasoline throughput data for the previous calendar year to the Executive Officer on or before March 1 following each calendar year.

NOTICE

In accordance with Rule 206, this permit to operate or copy shall be posted on or within 8 meters of the equipment.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State Of California or the rules of the Air Quality Management District. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

EXECUTIVE OFFICER

By Dorris M. Bailey/jm04
03/02/2016

FILE COPY

User: lramos

SCAQMD Facility Equipment List Report

Run Date : 06/05/2018 06:33 AM

Facility: 112037 VICTORIA GOLF COURSE
Status: Active
MR: A 5 SIC: Team: X
Last Inspection: 01/29/2014 On Hold: N Suspended: N TS: TS-51 Toxics: Landfills, other
Quarter: 1000 - inspect in 1st quarter, every year
Contact: TOM LEVIN (310) 5327690 RECLAIM: N TITLE V: N AIRS ID:
Assignment: 1412801
Location Address: 340 E 192ND ST, CARSON 90746 Sector:LF
Inspector: BP01 BEVERLY D CALDWELL
Mailing Address: 340 E 192ND ST, CARSON 90746 Sector:LF
Inspection Date: 01/29/2014
Instruction:
Disposition: Notice To Comply

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
333744	N9217	05/31/2001	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	10/16/1997	PERMIT TO OPERATE GRANTED
581798	N29965	03/02/2016	ACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	02/11/2016	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

NOV P71277

Run Date : 06/05/2018 06:35:40

Company

Facility:	VICTORIA GOLF COURSE (ID: 112037)
Location Address:	340 E 192ND, ST CARSON, CA 90746
Mailing Address:	340 E 192ND, ST CARSON, CA 90746
AIRS ID	

Violation

Notice Issued Date:	12/01/2017
Violation Date:	03/02/2017
Serve To:	GASOLINE DISPENSING FACILITY
Title:	
Issue By:	KIERSTEN MELVILLE (Team: S)
Assignment No.:	1663667
Equipment Description:	

Violation: Failing to submit the facility's monthly gasoline throughput data for the previous calendar year on or before March 1, 2017. Certified Mail Tracking #70171450000217313945

Disposition

Final Action Code:	
Achieved Date:	12/18/2017
Due Date:	
Violation Days:	0

Rule/Comment

461(c)(3)(Q)

Emittent

Follow-Up

Status: INCOMP Inspector ID: KM06 Inspection Date: 12/18/17 00:00 Number:

Lap Sample Numbers

Device IDs.

Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
N9217
~~A/N 333744~~

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner
or Operator:

VICTORIA GOLF COURSE
340 E 192ND ST
CARSON, CA 90746

ID 112037

Equipment Location: 340 E 192ND ST, CARSON, CA 90746

Equipment Description:

Fuel Storage and Dispensing Facility Consisting of:

1) 1 – DUAL COMPARTMENT ABOVE GROUND GASOLINE/DIESEL STORAGE TANK, HOOVER LUBE CUBE TYPE(G-70-148-A),RECTANGULAR 12'-0" L. x 6'-0" W. x 5'- 0" H., CAPACITY 1,500 GALLONS, CONCRETE INSULATION, EQUIPPED WITH A PRESSURE/VACUUM RELIEF VALVE, AND A SUBMERGED FILL TUBE, CONSISTING OF:

   A. ONE 1000-GALLON GASOLINE COMARTMENT TANK, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.

   B. ONE 500-GALLON DIESEL COMPARTMENT TANK, NOT EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM (EXEMPT).

2) 1 - GASOLINE NOZZLE DISPENSING 1 PRODUCT ON A TANK TOP MOUNTED DISPENSER EQUIPPED WITH PHASE II VAPOR RECOVERY SYSTEM BALANCE RETRACTOR .

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT WAS ISSUED, UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. EXCEPT FOR DIESEL TRANSFERS, PHASE I VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO STORAGE TANKS.

4. EXCEPT FOR DIESEL TRANSFERS, PHASE II VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO MOTOR VEHICLES, AS DEFINED IN RULE 461.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

5. ALL PHASE I AND PHASE II VAPOR RECOVERY EQUIPMENT AT THIS FACILITY SHALL BE INSTALLED, OPERATED AND MAINTAINED TO MEET ALL CALIFORNIA AIR RESOURCES BOARD CERTIFICATION REQUIREMENTS.

6. PHASE II VAPOR RECOVERY SYSTEMS SHALL BE INSTALLED, OPERATED, AND MAINTAINED SUCH THAT THE MAXIMUM ALLOWABLE PRESSURE THROUGH THE SYSTEM INCLUDING NOZZLE, VAPOR HOSE, SWIVELS, AND UNDERGROUND PIPING DOES NOT EXCEED THE DYNAMIC BACK PRESSURES DESCRIBED BY THE CALIFORNIA AIR RESOURCES BOARD EXECUTIVE ORDER BY WHICH THE SYSTEM WAS CERTIFIED:

NITROGEN FLOWRATES (CFH)	DYNAMIC BACK PRESSURE (INCHES OF WATER)
20	0.15
40	0.16
60	0.35
80	0.62
100	0.95

DYNAMIC BACK PRESSURE TESTS SHALL BE CONDUCTED TO DETERMINE THE PHASE II SYSTEM VAPOR RECOVERY BACK PRESSURES. THE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.4. RESULTS SHALL BE SUBMITTED TO THE DISTRICT, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN FORTY-EIGHT (48) HOURS OF TESTS.

THE AQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR AT TELEPHONE NUMBER (909) 396-3886 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO TESTING. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE DYNAMIC BACK PRESSURE TEST.

7. A STATIC PRESSURE LEAK DECAY TEST SHALL BE CONDUCTED TO DEMONSTRATE THAT THE STORAGE TANKS, THE REMOTE AND/OR NOZZLE VAPOR RECOVERY CHECK VALVES, ASSOCIATED VAPOR RETURN PIPING AND FITTINGS ARE FREE FROM VAPOR LEAKS. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.3. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN FORTY-EIGHT (48) HOURS OF TEST.

THE AQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR AT TELEPHONE NUMBER (909) 396-3886 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO TESTING. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE STATIC PRESSURE LEAK DECAY TEST.

8. IF THE CARB EXECUTIVE ORDER REQUIRES THE INSTALLATION OF A LIQUID REMOVAL DEVICE, A LIQUID REMOVAL RATE TEST SHALL BE CONDUCTED TO DEMONSTRATE THE REMOVAL OF GASOLINE FROM THE VAPOR PASSAGE OF THE COAXIAL HOSE. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.6. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN FORTY-EIGHT (48) HOURS OF TEST.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

THE SCAQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR AT TELEPHONE NUMBER (909) 396-3886 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO TESTING. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE LIQUID REMOVAL RATE TEST.

9. THE TESTING FREQUENCY FOR THE ABOVE MENTIONED TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH THE MOST RECENT RULE 461 AMENDMENT OR CARB EXECUTIVE ORDER REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

10. ALL RECORDS AND TEST RESULTS THAT ARE REQUIRED TO BE MAINTAINED BY RULE 461 SHALL BE KEPT ON SITE AND MADE AVAILABLE TO DISTRICT REPRESENTATIVES UPON REQUEST.

11. THE MAXIMUM QUANTITY OF GASOLINE DISPENSED FROM THE STORAGE TANKS AT THIS FACILITY SHALL NOT EXCEED 2083 GALLONS IN ANY ONE CALENDAR MONTH NOR 25000 GALLONS IN ANY ONE CALENDAR YEAR.

12. RECORDS OF MONTHLY AND ANNUAL FUEL DISPENSED SHALL BE PREPARED, SHALL BE RETAINED ON SITE FOR TWO YEARS, AND SHALL BE MADE AVAILABLE TO DISTRICT REPRESENTATIVES UPON REQUEST.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/ad01
5/31/2001

FILE COPY

APPENDIX C

Radius Map Report

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746

Inquiry Number: 5315435.2s
May 30, 2018

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

340 EAST 192 STREET
CARSON, CA 90746

COORDINATES

Latitude (North):	33.8542680 - 33° 51' 15.36''
Longitude (West):	118.2684490 - 118° 16' 6.41''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	382655.5
UTM Y (Meters):	3746527.5
Elevation:	27 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5633779 TORRANCE, CA
Version Date:	2012
Southeast Map:	5652670 LONG BEACH, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140513
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
340 EAST 192 STREET
CARSON, CA 90746

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	VICTORIA GOLF COURSE	340 E 192 ST	SEMS, LOS ANGELES CO. HMS		TP
A2	VICTORIA GOLF COURSE	340 EAST 192ND STREE	FINDS		TP
A3	VICTORIA GOLF COURSE	340 E 192ND ST	HIST UST, LOS ANGELES CO. HMS, CIWQS		TP
A4	340 E 192ND STREET	340 E 192ND ST	CIWQS		TP
A5	VICTORIA GOLF COURSE	340 EAST 192ND STREE	RESPONSE, ENVIROSTOR, LUST, Cortese, HIST CORTESE,...		TP
A6	VICTORIA GOLF COURSE	340 E 192 ST	HIST UST		TP
Reg	DEL AMO	DEL AMO BLVD AND VER	NPL, SEMS, US ENG CONTROLS, US INST CONTROL,...	Same	3991, 0.756, West
Reg	MONTROSE CHEMICAL CO	20201 SOUTH NORMANDI	NPL, SEMS, RCRA-LQG, US ENG CONTROLS, US INST...	Same	2946, 0.558, South
B7	TOWNE AVENUE ELEMENT	18924 TOWNE AVENUE	ENVIROSTOR, SCH	Lower	245, 0.046, North
B8	TOWNE AVENUE ELEMENT	18924 TOWNE AVE	RCRA-LQG, FINDS, ECHO	Lower	245, 0.046, North
C9	SHELL OIL CO 204-131	605 E. UNIVERSITY	RCRA-LQG	Lower	635, 0.120, NNE
C10	VICS SHELL SERVICE	605 E 190TH STREET	EDR Hist Auto	Lower	635, 0.120, NNE
C11	SHELL OIL CO	605 E UNIVERSITY DR	SWEEPS UST, LOS ANGELES CO. HMS	Lower	635, 0.120, NNE
C12	RONALD NAGANO	605 E UNIVERSITY	HIST UST	Lower	635, 0.120, NNE
D13	WALMART NEIGHBORHOOD	20226 AVALON BLVD	RCRA-SQG, FINDS, ECHO	Lower	718, 0.136, SSE
D14	MR. JAY'S CLEANERS	20232 S AVALON BLVD	DRYCLEANERS	Lower	732, 0.139, SSE
D15	MR. JAY CLEANERS	20232 S AVALON BLVD	DRYCLEANERS	Lower	732, 0.139, SSE
D16	MR JAY CLEANERS, CHI	20232 S AVALON BLVD	DRYCLEANERS	Lower	732, 0.139, SSE
D17	MR. JAY'S CLEANER	20232 AVALON	CPS-SLIC	Lower	732, 0.139, SSE
D18	MR JAY CLEANERS	20232 S AVALON BLVD	RCRA NonGen / NLR, FINDS, ECHO, DRYCLEANERS, EMI,...	Lower	732, 0.139, SSE
E19	RALPHS GROCERY #255	619 E UNIVERSITY DR	SWRCY, HAZNET	Lower	792, 0.150, NE
E20	CARSON PLAZA	603 UNIVERSITY	CPS-SLIC	Lower	963, 0.182, NE
E21	CARSON PLAZA	603 E. UNIVERSITY DR	CPS-SLIC	Lower	963, 0.182, NE
E22	NATS CLEANERS CARSON	641 EAST UNIVERSITY	ENVIROSTOR, VCP, FINDS, CIWQS	Lower	963, 0.182, NE
F23	CARSON MOBIL	20223 S AVALON BLVD	UST	Lower	992, 0.188, SSE
E24	NAT'S CLEANERS	641 E UNIVERSITY DR	DRYCLEANERS	Lower	1003, 0.190, NE
E25	NAT'S CLEANERS	641 E UNIVERSITY DR	DRYCLEANERS, HAZNET	Lower	1003, 0.190, NE
E26	NAT'S CLEANERS, OKBA	641 E UNIVERSITY DR	DRYCLEANERS	Lower	1003, 0.190, NE
E27	CARSON PLAZA-NATS CL	641 E UNIVERSITY DR	DRYCLEANERS, WDS	Lower	1003, 0.190, NE
E28	NAT'S CLEANERS	641 E UNIVERSITY DR	DRYCLEANERS	Lower	1003, 0.190, NE
G29	EXXONMOBIL OIL CORP.	20240 AVALON BLVD	RCRA-LQG	Lower	1022, 0.194, SSE
G30	ART PAUL SVC	20240 AVALON	RCRA-SQG, LUST, FINDS, ECHO, HAZNET, HIST CORTESE,..	Lower	1022, 0.194, SSE
G31	MOBIL OIL CORP S/S #	20240 AVALON BLVD	UST	Lower	1022, 0.194, SSE
G32	MOBIL OIL CORP	20240 S AVALON BLVD	SWEEPS UST, CA FID UST, LOS ANGELES CO. HMS	Lower	1022, 0.194, SSE
G33	MOBIL 18-MA8	20240 AVALON BLVD	LUST	Lower	1022, 0.194, SSE
G34	ARTHUR H PAUL	20240 AVALON	HIST UST	Lower	1022, 0.194, SSE
F35	CARSON MOBIL	20223 S AVALON BLVD	RCRA-SQG, HIST UST, FINDS, ECHO	Lower	1042, 0.197, SSE
F36	SHELL #204-1312-0609	20223 AVALON BLVD	LUST, HIST CORTESE	Lower	1042, 0.197, SSE
F37	SHELL OIL COMPANY	20223 S AVALON BLVD	SWEEPS UST, CA FID UST, LOS ANGELES CO. HMS	Lower	1042, 0.197, SSE

MAPPED SITES SUMMARY

Target Property Address:
340 EAST 192 STREET
CARSON, CA 90746

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
F38	DEL AMO SHELL # 6765	20223 S AVALON	HIST UST, HAZNET	Lower	1042, 0.197, SSE
F39	DEL AMO SHELL (#1312	20223 AVALON BLVD	UST	Lower	1042, 0.197, SSE
H40	UNION OIL SERVICE ST	20315 AVALON BLVD	HIST UST	Lower	1247, 0.236, SSE
H41	SERVICE STATION 5651	20315 AVALON BLVD	HIST UST	Lower	1247, 0.236, SSE
H42	MCDONALD'S RESTAURAN	20315 AVALON BLVD	SWEEPS UST, LOS ANGELES CO. HMS	Lower	1247, 0.236, SSE
H43	UNOCAL #5651	20315 AVALON BLVD	LUST, HIST CORTESE	Lower	1247, 0.236, SSE
G44	EXXON SERVICE STAITO	20320 AVALON BLVD	HIST UST	Lower	1310, 0.248, SSE
G45	DELAMO PARK INC	20320 AVALON BLVD	UST	Lower	1310, 0.248, SSE
G46	EXXON COMPANY USA -	20320 E AVALON BLVD	SWEEPS UST, CA FID UST	Lower	1310, 0.248, SSE
G47	EXXON RAS #7-3173	20320 SOUTH AVALON	HIST UST, HAZNET	Lower	1310, 0.248, SSE
G48	DEL AMO PARK INC	20320 S AVALON BLVD	UST	Lower	1310, 0.248, SSE
G49	EXXON #7-3173	20320 AVALON BLVD E	LUST, HIST CORTESE	Lower	1310, 0.248, SSE
50	ACTA SOUTH - DEL AMO	DEL AMO	CPS-SLIC	Lower	1356, 0.257, SE
I51	GOODYEAR AIRSHIP OPE	19200 MAIN STREET	SWF/LF, EMI	Lower	1526, 0.289, WNW
I52	BKK PUBLIC DUMP -CAR	19200-19800 SOUTH MA	SWF/LF	Lower	1526, 0.289, WNW
I53	GOODYEAR AIRSHIP OPE	19200 MAIN	HIST CORTESE, NPDES, CIWQS	Lower	1526, 0.289, WNW
I54	BKK CORPORATION-CARS	19200 SOUTH MAIN	WMUDS/SWAT	Lower	1526, 0.289, WNW
I55	BKK CARSON LANDFILL	19200 MAIN STREET	LUST, LDS	Lower	1526, 0.289, WNW
I56	GOODYEAR AIRSHIP FAC	19200 SOUTH MAIN STR	ENVIROSTOR, VCP, SWEEPS UST, LOS ANGELES CO. HMS	Lower	1526, 0.289, WNW
J57	BROADWAY--MAIN	19101 SOUTH MAIN STR	WMUDS/SWAT	Lower	1544, 0.292, WNW
K58	LIQUID CHEM CORP	18911 S MAIN ST	SEMS-ARCHIVE	Lower	1583, 0.300, WNW
59	LA-405 DOMINGUEZ GOL	RIGHT-OF-WAY BETWEEN	ENVIROSTOR, VCP	Lower	1586, 0.300, WSW
60	JERRY'S CLEANERS	516 CARSON PLAZA COU	CPS-SLIC, DRYCLEANERS	Lower	1615, 0.306, SSE
J61	CARSON CITY TOWING S	19135 MAIN ST S	LUST, HIST CORTESE	Lower	1650, 0.312, WNW
K62	VENUS LABORATORIES I	18903 S MAIN ST	SEMS-ARCHIVE	Lower	1723, 0.326, NW
K63	VENUS LABORATORIES	18903 SOUTH MAIN STR	ENVIROSTOR, HIST CORTESE	Lower	1723, 0.326, NW
I64	SOUTHWEST STEEL ROLL	19101 S. BROADWAY ST	SWF/LF	Lower	1806, 0.342, WNW
I65	BROADWAY & MAIN	19101 - 19145 SOUTH	ENVIROSTOR, VCP	Lower	1806, 0.342, WNW
I66	BROADWAY -MAIN LANDF	19101-19145 SOUTH BR	SWF/LF	Lower	1806, 0.342, WNW
L67	CARSON CITY CENTER (	708 CARSON	LUST, NPDES, CIWQS	Lower	1840, 0.348, SSE
L68	UNOCAL #2529	600 CARSON ST W	LUST, HIST CORTESE	Lower	1846, 0.350, SSE
69	MOR-GLOW PAINT COMPA	18937 S. MAIN STREET	SWF/LF, WMUDS/SWAT, LDS	Lower	1859, 0.352, WNW
L70	MOBIL #11-MBT	655 CARSON ST E	LUST, HIST CORTESE	Lower	1883, 0.357, SSE
M71	THRIFTY #267 (FORMER	18523 AVALON BLVD S	LUST	Lower	1902, 0.360, NNE
M72	THRIFTY #267 (FORMER	18523 AVALON	HAZNET, HIST CORTESE	Lower	1902, 0.360, NNE
N73	SHELL CHEMICAL CORP,	19401 SOUTH MAIN STR	SWF/LF	Lower	1974, 0.374, West
N74	SHELL CHEMICAL CORPO	19401 SOUTH MAIN STR	SWF/LF	Lower	1974, 0.374, West
75	NISSAN NORTH AMERICA	125 GRIFFITH	CPS-SLIC	Lower	1979, 0.375, NW
O76	DOMINGUEZ CAR WASH	20651 AVALON BLVD	LUST, HIST UST, HIST CORTESE	Lower	2333, 0.442, SSE

MAPPED SITES SUMMARY

Target Property Address:
340 EAST 192 STREET
CARSON, CA 90746

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
O77	DOMINGUEZ CAR WASH	20651 S AVALON BLVD	LUST, SWEEPS UST, HIST UST, CA FID UST, LOS...	Lower	2333, 0.442, SSE
78	NORTH CARSON AREA SI	VICINITY OF I-405 FR	ENVIROSTOR	Higher	2378, 0.450, West
P79	DON DOMINGUEZ APARTM	19822 MAIN ST	SWF/LF, NPDES, CIWQS	Higher	2388, 0.452, WSW
Q80	LA CO SANITATION DIS	18900 S. MONETA AVE	SWF/LF	Lower	2393, 0.453, WNW
R81	COLDWELL BANKER	19204 S. FIGUEROA ST	CPS-SLIC	Lower	2416, 0.458, WNW
O82	FIRESTONE TIRE CO	20707 AVALON BLVD S	LUST	Lower	2547, 0.482, SSE
O83	FIRESTONE TIRE CO	20707 AVALON	HIST CORTESE	Lower	2547, 0.482, SSE
P84	DOMINGUEZ GOLF COURS	19800 S. MAIN STREET	ENVIROSTOR, LUST, VCP, HAZNET, HIST CORTESE, LOS...	Higher	2559, 0.485, WSW
R85	SALCO	19204 S FIGUEROA	RCRA-SQG, SWF/LF, LUST, EMI, ENF, HIST CORTESE, LA...	Lower	2561, 0.485, West
86	KATZ DUMP	BROADWAY & VICTORIA	SWF/LF	Lower	2602, 0.493, NW
Q87	MARY ANN KAY	19130 S FIGUEROA ST	SWF/LF, HAZNET	Lower	2620, 0.496, WNW
Q88	GATEWAY BUSINESS PRO	19130 S FIGUEROA ST	CPS-SLIC, ENF, LOS ANGELES CO. HMS	Lower	2620, 0.496, WNW
R89	SALCO	19204 FIGUEROA ST S	LUST	Lower	2638, 0.500, West
90	CARROLL SHELBY ENTER	19021 SOUTH FIGUEROA	ENVIROSTOR, VCP	Higher	2767, 0.524, WNW
S91	CAL COMPACT LANDFILL	20300 SOUTH MAIN STR	CA BOND EXP. PLAN	Lower	3145, 0.596, SW
S92	CAL-COMPACT 2 SANITA	20300 SOUTH MAIN STR	ENVIROSTOR, LDS, HIST CORTESE	Lower	3145, 0.596, SW
T93	CAL COMPACT LANDFILL	20400 MAIN ST	HIST Cal-Sites, NPDES, WDS, CIWQS	Lower	3428, 0.649, SW
T94	CARSON MARKETPLACE L	20400 MAIN ST	RESPONSE, ENVIROSTOR, SWF/LF, LDS, Cortese,...	Lower	3428, 0.649, SW
T95	WERDIN DUMP	20402 S MAIN ST	ENVIROSTOR	Lower	3437, 0.651, SW
96	WILMINGTON/GRAMERCY	BETWEEN TRANSMISSION	ENVIROSTOR, VCP	Higher	3460, 0.655, WNW
97	GS NURSERY	20331 MAIN STREET	ENVIROSTOR, SWF/LF, VCP, LIENS	Lower	3834, 0.726, SW
98	REBEL MINI STORAGE	20501 S. MAIN STREET	ENVIROSTOR, VCP, DEED	Lower	4040, 0.765, SW
99	FIRST IMAGE MANAGEME	19701 S. HAMILTON AV	ENVIROSTOR	Higher	4217, 0.799, West
U100	WESTERN CONCRETE STR	19113 SOUTH HAMILTON	ENVIROSTOR	Higher	4237, 0.802, West
U101	RUBBER TECK INC	19115 S HAMILTON ST	SEMS-ARCHIVE, RCRA-SQG, ENVIROSTOR, HIST CORTESE	Higher	4332, 0.820, West
102	GARDENA VALLEY LANDF	CHICO AND DOMINGUEZ	ENVIROSTOR, VCP, CA BOND EXP. PLAN	Lower	4445, 0.842, SE
103	GARDENA VALLEY LANDF	BTW DEL AMO,TORRANCE	ENVIROSTOR, VCP, HIST Cal-Sites, DEED	Lower	4634, 0.878, SW
104	ROBERTS COMPANY	550 PATRICE PLACE	ENVIROSTOR	Higher	4850, 0.919, NW
105	PRIME WHEEL CORP	17705 S MAIN ST	ENVIROSTOR, LOS ANGELES CO. HMS, NPDES, WDS, CIWQS	Lower	5013, 0.949, NNW
106	GOLDEN WEST CIRCUITS	1139 E. DOMINGUEZ ST	ENVIROSTOR	Lower	5028, 0.952, SE
107	MARTIN ADAMS DUMP	213 ST TO 21111 DOLO	SEMS, ENVIROSTOR, SWF/LF, CHMIRS	Lower	5057, 0.958, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
VICTORIA GOLF COURSE 340 E 192 ST CARSON, CA 90746	SEMS Site ID: 0902097 EPA Id: CAD980818926 LOS ANGELES CO. HMS Facility ID: 010001-036358 Facility ID: 026417-035998	CAD980818926
VICTORIA GOLF COURSE 340 EAST 192ND STREE CARSON, CA 90746	FINDS Registry ID:: 110033614239	N/A
VICTORIA GOLF COURSE 340 E 192ND ST CARSON, CA 90746	HIST UST Facility Id: 00000020845 LOS ANGELES CO. HMS Facility ID: 010001-036123 CIWQS	N/A
340 E 192ND STREET 340 E 192ND ST CARSON, CA 90746	CIWQS	N/A
VICTORIA GOLF COURSE 340 EAST 192ND STREE CARSON, CA 90746	RESPONSE Database: RESPONSE, Date of Government Version: 01/30/2018 Status: Active Facility Id: 19490191 ENVIROSTOR Facility Id: 19490191 Status: Active LUST Database: LUST REG 4, Date of Government Version: 09/07/2004 Database: LUST, Date of Government Version: 03/12/2018 Status: Completed - Case Closed Facility Id: R-09857 Status: Case Closed Global Id: T0603704868 Global ID: T0603704868 Cortese Envirostor Id: 19490191 Cleanup Status: ACTIVE HIST CORTESE Reg Id: R-09857 LOS ANGELES CO. HMS	N/A

EXECUTIVE SUMMARY

Facility ID: 010001-009857

NPDES
Facility Status: Active

CIWQS

VICTORIA GOLF COURSE
340 E 192 ST
CARSON, CA 90063

HIST UST N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal leaking storage tank lists

INDIAN LUST - Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST - Underground Storage Tank Listing
AST - Aboveground Petroleum Storage Tank Facilities
INDIAN UST - Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP - Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS - Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS - A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

HAULERS - Registered Waste Tire Haulers Listing
INDIAN ODI - Report on the Status of Open Dumps on Indian Lands
ODI - Open Dump Inventory
DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS - Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

AOCONCERN - San Gabriel Valley Areas of Concern
US HIST CDL - Delisted National Clandestine Laboratory Register
CDL - Clandestine Drug Labs
Toxic Pits - Toxic Pits Cleanup Act Sites
US CDL - National Clandestine Laboratory Register

Local Land Records

LIENS - Environmental Liens Listing
LIENS 2 - CERCLA Lien Information
DEED - Deed Restriction Listing

Records of Emergency Release Reports

HMIRS - Hazardous Materials Information Reporting System
CHMIRS - California Hazardous Material Incident Report System
LDS - Land Disposal Sites Listing
MCS - Military Cleanup Sites Listing
SPILLS 90 - SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
CUPA Listings	CUPA Resources List
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
LA Co. Site Mitigation	Site Mitigation List
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

WELL STIM PROJ ---------- Well Stimulation Project (GEOTRACKER)
PROJECT ---------- PROJECT (GEOTRACKER)
MILITARY PRIV SITES ---------- MILITARY PRIV SITES (GEOTRACKER)
NON-CASE INFO ---------- NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS ---------- OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS ---------- PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT ---------- SAMPLING POINT (GEOTRACKER)
UIC GEO ---------- UIC GEO (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner ---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 12/11/2017 has revealed that there are 2 NPL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DEL AMO	***DEL AMO BLVD AND VER***	***W 1/2 - 1 (0.756 mi.)***	***0***	***28***
MONTROSE CHEMICAL CO	***20201 SOUTH NORMANDI***	***S 1/2 - 1 (0.558 mi.)***	***0***	***72***

EXECUTIVE SUMMARY

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 01/09/2018 has revealed that there are 2 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
LIQUID CHEM CORP	18911 S MAIN ST	WNW 1/4 - 1/2 (0.300 mi.)	K58	218
VENUS LABORATORIES I	18903 S MAIN ST	NW 1/4 - 1/2 (0.326 mi.)	K62	225

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/11/2017 has revealed that there are 3 RCRA-LQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWNE AVENUE ELEMENT	***18924 TOWNE AVE***	***N 0 - 1/8 (0.046 mi.)***	***B8***	***135***
SHELL OIL CO 204-131	605 E. UNIVERSITY	NNE 0 - 1/8 (0.120 mi.)	C9	137
EXXONMOBIL OIL CORP.	20240 AVALON BLVD	SSE 1/8 - 1/4 (0.194 mi.)	G29	170

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/11/2017 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WALMART NEIGHBORHOOD	***20226 AVALON BLVD***	***SSE 1/8 - 1/4 (0.136 mi.)***	***D13***	***140***
ART PAUL SVC	***20240 AVALON***	***SSE 1/8 - 1/4 (0.194 mi.)***	***G30***	***171***
CARSON MOBIL	***20223 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.197 mi.)***	***F35***	***183***

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARSON MARKETPLACE L	***20400 MAIN ST***	***SW 1/2 - 1 (0.649 mi.)***	***T94***	***390***
Database: RESPONSE, Date of Government Version: 01/30/2018 Status: Active Facility Id: 19490019				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2018 has revealed that there are 25 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DEL AMO Facility Id: 19300230 Status: Active	***DEL AMO BLVD AND VER***	***W 1/2 - 1 (0.756 mi.)***	***0***	***28***
NORTH CARSON AREA SI Facility Id: 60002068 Status: No Action Required	VICINITY OF I-405 FR	W 1/4 - 1/2 (0.450 mi.)	78	277
DOMINGUEZ GOLF COURS Facility Id: 60000597 Status: Active	***19800 S. MAIN STREET***	***WSW 1/4 - 1/2 (0.485 mi.)***	***P84***	***284***
CARROLL SHELBY ENTER Facility Id: 60001060 Status: Active	***19021 SOUTH FIGUEROA***	***WNW 1/2 - 1 (0.524 mi.)***	***90***	***350***
WILMINGTON/GRAMERCY Facility Id: 19490245 Status: Active	***BETWEEN TRANSMISSION***	***WNW 1/2 - 1 (0.655 mi.)***	***96***	***502***
FIRST IMAGE MANAGEME Facility Id: 71003267 Status: Refer: Other Agency	19701 S. HAMILTON AV	W 1/2 - 1 (0.799 mi.)	99	532
WESTERN CONCRETE STR	19113 SOUTH HAMILTON	W 1/2 - 1 (0.802 mi.)	U100	533

Facility Id: 19320133
Status: Refer: Other Agency

RUBBER TECK INC	***19115 S HAMILTON ST***	***W 1/2 - 1 (0.820 mi.)***	***U101***	***535***
Facility Id: 19300025 Status: Refer: Other Agency				
ROBERTS COMPANY	550 PATRICE PLACE	NW 1/2 - 1 (0.919 mi.)	104	560
Facility Id: 60001105 Status: No Further Action				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWNE AVENUE ELEMENT	***18924 TOWNE AVENUE***	***N 0 - 1/8 (0.046 mi.)***	***B7***	***131***
Facility Id: 19990038 Status: No Further Action				
NATS CLEANERS CARSON	***641 EAST UNIVERSITY***	***NE 1/8 - 1/4 (0.182 mi.)***	***E22***	***158***
Facility Id: 60000604 Status: Active				
GOODYEAR AIRSHIP FAC	***19200 SOUTH MAIN STR***	***WNW 1/4 - 1/2 (0.289 mi.)***	***I56***	***214***
Facility Id: 60002022 Status: Active				
LA-405 DOMINGUEZ GOL	***RIGHT-OF-WAY BETWEEN***	***WSW 1/4 - 1/2 (0.300 mi.)***	***59***	***219***
Facility Id: 60000633 Status: Inactive - Action Required				
VENUS LABORATORIES	***18903 SOUTH MAIN STR***	***NW 1/4 - 1/2 (0.326 mi.)***	***K63***	***227***
Facility Id: 19280813 Status: Refer: Other Agency				
BROADWAY & MAIN	***19101 - 19145 SOUTH***	***WNW 1/4 - 1/2 (0.342 mi.)***	***I65***	***229***
Facility Id: 60001991 Status: Active				
CAL-COMPACT 2 SANITA	***20300 SOUTH MAIN STR***	***SW 1/2 - 1 (0.596 mi.)***	***S92***	***370***
Facility Id: 19490193 Status: Inactive - Needs Evaluation				
CARSON MARKETPLACE L	***20400 MAIN ST***	***SW 1/2 - 1 (0.649 mi.)***	***T94***	***390***
Facility Id: 19490019 Status: Active				
WERDIN DUMP	20402 S MAIN ST	SW 1/2 - 1 (0.651 mi.)	T95	501
Facility Id: 19490104 Status: Refer: RWQCB				
GS NURSERY	***20331 MAIN STREET***	***SW 1/2 - 1 (0.726 mi.)***	***97***	***516***
Facility Id: 60000514 Status: Inactive - Action Required				
REBEL MINI STORAGE	***20501 S. MAIN STREET***	***SW 1/2 - 1 (0.765 mi.)***	***98***	***523***
Facility Id: 19000020 Status: Certified / Operation & Maintenance				
GARDENA VALLEY LANDF	***CHICO AND DOMINGUEZ***	***SE 1/2 - 1 (0.842 mi.)***	***102***	***539***
Facility Id: 19490105 Status: Active				
GARDENA VALLEY LANDF	***BTW DEL AMO,TORRANCE***	***SW 1/2 - 1 (0.878 mi.)***	***103***	***550***
Facility Id: 19490203 Status: Certified O&M - Land Use Restrictions Only				
PRIME WHEEL CORP	***17705 S MAIN ST***	***NNW 1/2 - 1 (0.949 mi.)***	***105***	***561***

Facility Id: 71003444
Status: Refer: Other Agency

GOLDEN WEST CIRCUITS — 1139 E. DOMINGUEZ ST — SE 1/2 - 1 (0.952 mi.) — 106 — 566
Facility Id: 71002805
Status: Refer: Other Agency

MARTIN ADAMS DUMP — ***213 ST TO 21111 DOLO*** — ***SSW 1/2 - 1 (0.958 mi.)*** — ***107*** — ***567***
Facility Id: 19530002
Status: Inactive - Action Required

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there are 12 SWF/LF sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DON DOMINGUEZ APARTM	***19822 MAIN ST***	***WSW 1/4 - 1/2 (0.452 mi.)***	***P79***	***278***
Database: LOS ANGELES CO. LF, Date of Government Version: 01/16/2018 Site ID: 2251 Status: Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GOODYEAR AIRSHIP OPE	***19200 MAIN STREET***	***WNW 1/4 - 1/2 (0.289 mi.)***	***I51***	***204***
Database: LOS ANGELES CO. LF, Date of Government Version: 01/16/2018 Site ID: 1883 Status: Closed				
BKK PUBLIC DUMP -CAR	19200-19800 SOUTH MA	WNW 1/4 - 1/2 (0.289 mi.)	I52	206
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018 Facility ID: 19-AQ-0014 Operational Status: Closed Regulation Status: Pre-regulations				
SOUTHWEST STEEL ROLL	19101 S. BROADWAY ST	WNW 1/4 - 1/2 (0.342 mi.)	I64	228
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018 Facility ID: 19-AQ-5017 Operational Status: Closed Regulation Status: Unpermitted				
BROADWAY -MAIN LANDF	19101-19145 SOUTH BR	WNW 1/4 - 1/2 (0.342 mi.)	I66	233
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018 Facility ID: 19-AQ-0008 Operational Status: Closed Regulation Status: Unpermitted				
MOR-GLOW PAINT COMPA	***18937 S. MAIN STREET***	***WNW 1/4 - 1/2 (0.352 mi.)***	***69***	***243***
Database: LOS ANGELES CO. LF, Date of Government Version: 01/16/2018 Site ID: 2257 Status: Closed				
SHELL CHEMICAL CORP,	19401 SOUTH MAIN STR	W 1/4 - 1/2 (0.374 mi.)	N73	263
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018				

Facility ID: 19-AQ-5029
Operational Status: Closed
Regulation Status: Unpermitted

SHELL CHEMICAL CORPO | 19401 SOUTH MAIN STR | W 1/4 - 1/2 (0.374 mi.) | N74 | 264
Database: LOS ANGELES CO. LF, Date of Government Version: 01/16/2018
Site ID: 2256
Status: Closed

LA CO SANITATION DIS | 18900 S. MONETA AVE | WNW 1/4 - 1/2 (0.453 mi.) | Q80 | 281
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018
Facility ID: 19-AQ-0019
Operational Status: Closed
Regulation Status: Unpermitted

SALCO | 19204 S FIGUEROA | W 1/4 - 1/2 (0.485 mi.) | R85 | 338
Database: LOS ANGELES CO. LF, Date of Government Version: 01/16/2018
Site ID: 2484
Status: Closed

KATZ DUMP | BROADWAY & VICTORIA | NW 1/4 - 1/2 (0.493 mi.) | 86 | 344
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018
Facility ID: 19-AQ-5057

MARY ANN KAY | 19130 S FIGUEROA ST | WNW 1/4 - 1/2 (0.496 mi.) | Q87 | 345
Database: SWF/LF (SWIS), Date of Government Version: 02/12/2018
Facility ID: 19-AQ-5037
Operational Status: Clean Closed
Regulation Status: Unpermitted

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 17 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOMINGUEZ GOLF COURS	***19800 S. MAIN STREET***	***WSW 1/4 - 1/2 (0.485 mi.)***	***P84***	***284***

Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-16281
Status: Case Closed
Global Id: T0603704401
Global ID: T0603704401

Lower Elevation	Address	Direction / Distance	Map ID	Page
ART PAUL SVC	***20240 AVALON***	***SSE 1/8 - 1/4 (0.194 mi.)***	***G30***	***171***

Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T0603703197

MOBIL 18-MA8 | 20240 AVALON BLVD | SSE 1/8 - 1/4 (0.194 mi.) | G33 | 181
Database: LUST REG 4, Date of Government Version: 09/07/2004

Facility Id: I-06340
Status: Pollution Characterization
Global ID: T0603703197

SHELL #204-1312-0609 ***20223 AVALON BLVD*** ***SSE 1/8 - 1/4 (0.197 mi.)*** ***F36*** ***186***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: 907460034
Status: Case Closed
Global Id: T0603701684
Global ID: T0603701684

UNOCAL #5651 ***20315 AVALON BLVD*** ***SSE 1/8 - 1/4 (0.236 mi.)*** ***H43*** ***195***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-02867
Status: Case Closed
Global Id: T0603702869
Global ID: T0603702869

EXXON #7-3173 ***20320 AVALON BLVD E*** ***SSE 1/8 - 1/4 (0.248 mi.)*** ***G49*** ***201***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-00045
Status: Case Closed
Global Id: T0603702658
Global ID: T0603702658

BKK CARSON LANDFILL ***19200 MAIN STREET*** ***WNW 1/4 - 1/2 (0.289 mi.)*** ***I55*** ***211***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: R-13099
Status: Case Closed
Global Id: T0603705177
Global ID: T0603705177

CARSON CITY TOWING S ***19135 MAIN ST S*** ***WNW 1/4 - 1/2 (0.312 mi.)*** ***J61*** ***223***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: R-10383
Status: Case Closed
Global Id: T0603704935
Global ID: T0603704935

CARSON CITY CENTER (***708 CARSON*** ***SSE 1/4 - 1/2 (0.348 mi.)*** ***L67*** ***234***
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T10000000071

UNOCAL #2529 ***600 CARSON ST W*** ***SSE 1/4 - 1/2 (0.350 mi.)*** ***L68*** ***240***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-06264
Status: Case Closed

Global Id: T0603703189
Global ID: T0603703189

MOBIL #11-MBT ***655 CARSON ST E*** ***SSE 1/4 - 1/2 (0.357 mi.)*** ***L70*** ***245***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-00062
Status: Case Closed
Global Id: T0603766538
Global Id: T0603702661
Global Id: T10000009136
Global ID: T0603702661

THRIFTY #267 (FORMER 18523 AVALON BLVD S NNE 1/4 - 1/2 (0.360 mi.) M71 253
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-05581
Status: Remediation Plan
Global Id: T0603703086
Global ID: T0603703086

DOMINGUEZ CAR WASH ***20651 AVALON BLVD*** ***SSE 1/4 - 1/2 (0.442 mi.)*** ***O76*** ***266***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-06566
Status: Case Closed
Global Id: T0603703232
Global ID: T0603703232

DOMINGUEZ CAR WASH ***20651 S AVALON BLVD*** ***SSE 1/4 - 1/2 (0.442 mi.)*** ***O77*** ***269***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Facility Id: I-06566A
Status: Pollution Characterization
Global Id: T0603706590
Global ID: T0603706590

FIRESTONE TIRE CO 20707 AVALON BLVD S SSE 1/4 - 1/2 (0.482 mi.) O82 283
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T0603703051

SALCO ***19204 S FIGUEROA*** ***W 1/4 - 1/2 (0.485 mi.)*** ***R85*** ***338***
Database: LUST REG 4, Date of Government Version: 09/07/2004
Facility Id: I-01463
Status: Case Closed
Global ID: T0603702784

SALCO 19204 FIGUEROA ST S W 1/4 - 1/2 (0.500 mi.) R89 349
Database: LUST, Date of Government Version: 03/12/2018
Status: Completed - Case Closed
Global Id: T0603702784

EXECUTIVE SUMMARY

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 8 CPS-SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MR. JAY'S CLEANER	20232 AVALON	SSE 1/8 - 1/4 (0.139 mi.)	D17	150
Database: SLIC REG 4, Date of Government Version: 11/17/2004 Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: SL184631446 Facility Status: No further action required Facility Status: Completed - Case Closed				
CARSON PLAZA	603 UNIVERSITY	NE 1/8 - 1/4 (0.182 mi.)	E20	157
Database: SLIC REG 4, Date of Government Version: 11/17/2004 Facility Status: Site Assessment				
CARSON PLAZA	603 E. UNIVERSITY DR	NE 1/8 - 1/4 (0.182 mi.)	E21	158
Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: SLT43683681 Facility Status: Open - Site Assessment				
ACTA SOUTH - DEL AMO	DEL AMO	SE 1/4 - 1/2 (0.257 mi.)	50	204
Database: SLIC REG 4, Date of Government Version: 11/17/2004 Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: SL0603765866 Facility Status: No further action required Facility Status: Completed - Case Closed				
JERRY'S CLEANERS	***516 CARSON PLAZA COU***	***SSE 1/4 - 1/2 (0.306 mi.)***	***60***	***221***
Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: SL0603758226 Facility Status: Completed - Case Closed				
NISSAN NORTH AMERICA	125 GRIFFITH	NW 1/4 - 1/2 (0.375 mi.)	75	264
Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: T0603719669 Facility Status: Open - Assessment & Interim Remedial Action				
COLDWELL BANKER	19204 S. FIGUEROA ST	WNW 1/4 - 1/2 (0.458 mi.)	R81	282
Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: SLT4302119 Facility Status: Completed - Case Closed				
GATEWAY BUSINESS PRO	***19130 S FIGUEROA ST***	***WNW 1/4 - 1/2 (0.496 mi.)***	***Q88***	***347***
Database: CPS-SLIC, Date of Government Version: 03/12/2018 Global Id: SL204BM2356 Facility Status: Open - Inactive				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 5 UST sites within

approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARSON MOBIL Database: UST, Date of Government Version: 03/12/2018 Facility Id: LACoFA0004005	20223 S AVALON BLVD	SSE 1/8 - 1/4 (0.188 mi.)	F23	166
MOBIL OIL CORP S/S # Database: UST, Date of Government Version: 03/12/2018 Facility Id: 6340	20240 AVALON BLVD	SSE 1/8 - 1/4 (0.194 mi.)	G31	179
DEL AMO SHELL (#1312 Database: UST, Date of Government Version: 03/12/2018 Facility Id: 26241	20223 AVALON BLVD	SSE 1/8 - 1/4 (0.197 mi.)	F39	192
DELAMO PARK INC Database: UST, Date of Government Version: 03/12/2018 Facility Id: 24894	20320 AVALON BLVD	SSE 1/8 - 1/4 (0.248 mi.)	G45	198
DEL AMO PARK INC Database: UST, Date of Government Version: 03/12/2018 Facility Id: LACoFA0004003	20320 S AVALON BLVD	SSE 1/8 - 1/4 (0.248 mi.)	G48	201

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 01/30/2018 has revealed that there are 5 VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOMINGUEZ GOLF COURS Status: Active Facility Id: 60000597	***19800 S. MAIN STREET***	***WSW 1/4 - 1/2 (0.485 mi.)***	***P84***	***284***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NATS CLEANERS CARSON Status: Active Facility Id: 60000604	***641 EAST UNIVERSITY***	***NE 1/8 - 1/4 (0.182 mi.)***	***E22***	***158***
GOODYEAR AIRSHIP FAC Status: Active Facility Id: 60002022	***19200 SOUTH MAIN STR***	***WNW 1/4 - 1/2 (0.289 mi.)***	***I56***	***214***
LA-405 DOMINGUEZ GOL Status: Inactive - Action Required Facility Id: 60000633	***RIGHT-OF-WAY BETWEEN***	***WSW 1/4 - 1/2 (0.300 mi.)***	***59***	***219***
BROADWAY & MAIN Status: Active Facility Id: 60001991	***19101 - 19145 SOUTH***	***WNW 1/4 - 1/2 (0.342 mi.)***	***I65***	***229***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there are 3 WMUDS/SWAT sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BKK CORPORATION-CARS	19200 SOUTH MAIN	WNW 1/4 - 1/2 (0.289 mi.)	I54	210
BROADWAY--MAIN	19101 SOUTH MAIN STR	WNW 1/4 - 1/2 (0.292 mi.)	J57	217
MOR-GLOW PAINT COMPA	***18937 S. MAIN STREET***	***WNW 1/4 - 1/2 (0.352 mi.)***	***69***	***243***

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 03/12/2018 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RALPHS GROCERY #255	***619 E UNIVERSITY DR***	***NE 1/8 - 1/4 (0.150 mi.)***	***E19***	***155***
Cert Id: RC248215.001				

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 3 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DEL AMO	***DEL AMO BLVD AND VER***	***W 1/2 - 1 (0.756 mi.)***	***0***	***28***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAL COMPACT LANDFILL	***20400 MAIN ST***	***SW 1/2 - 1 (0.649 mi.)***	***T93***	***372***
GARDENA VALLEY LANDF	***BTW DEL AMO,TORRANCE***	***SW 1/2 - 1 (0.878 mi.)***	***103***	***550***

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 01/30/2018 has revealed that there is 1 SCH site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWNE AVENUE ELEMENT Facility Id: 19990038 Status: No Further Action	***18924 TOWNE AVENUE***	***N 0 - 1/8 (0.046 mi.)***	***B7***	***131***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 5 SWEEPS UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL OIL CO Status: A Comp Number: 10642	***605 E UNIVERSITY DR***	***NNE 0 - 1/8 (0.120 mi.)***	***C11***	***138***
MOBIL OIL CORP Status: A Tank Status: A Comp Number: 6340	***20240 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.194 mi.)***	***G32***	***179***
SHELL OIL COMPANY Status: A Tank Status: A Comp Number: 6469	***20223 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.197 mi.)***	***F37***	***189***
MCDONALD'S RESTAURAN Status: A Tank Status: A Comp Number: 2867	***20315 AVALON BLVD***	***SSE 1/8 - 1/4 (0.236 mi.)***	***H42***	***193***
EXXON COMPANY USA - Status: A Tank Status: A Comp Number: 45	***20320 E AVALON BLVD***	***SSE 1/8 - 1/4 (0.248 mi.)***	***G46***	***198***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 8 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RONALD NAGANO Facility Id: 00000000530	605 E UNIVERSITY	NNE 0 - 1/8 (0.120 mi.)	C12	139
ARTHUR H PAUL Facility Id: 00000040028	20240 AVALON	SSE 1/8 - 1/4 (0.194 mi.)	G34	182
CARSON MOBIL	***20223 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.197 mi.)***	***F35***	***183***

Facility Id: 00000006452				
DEL AMO SHELL # 6765	***20223 S AVALON***	***SSE 1/8 - 1/4 (0.197 mi.)***	***F38***	***190***
UNION OIL SERVICE ST Facility Id: 00000055489	20315 AVALON BLVD	SSE 1/8 - 1/4 (0.236 mi.)	H40	192
SERVICE STATION 5651 Facility Id: 00000007576	20315 AVALON BLVD	SSE 1/8 - 1/4 (0.236 mi.)	H41	192
EXXON SERVICE STAITO Facility Id: 00000029362	20320 AVALON BLVD	SSE 1/8 - 1/4 (0.248 mi.)	G44	197
EXXON RAS #7-3173	***20320 SOUTH AVALON***	***SSE 1/8 - 1/4 (0.248 mi.)***	***G47***	***200***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL OIL CORP Facility Id: 19000951 Status: A	***20240 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.194 mi.)***	***G32***	***179***
SHELL OIL COMPANY Facility Id: 19020582 Status: A	***20223 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.197 mi.)***	***F37***	***189***
EXXON COMPANY USA - Facility Id: 19003151 Status: A	***20320 E AVALON BLVD***	***SSE 1/8 - 1/4 (0.248 mi.)***	***G46***	***198***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/11/2017 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MR JAY CLEANERS	***20232 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.139 mi.)***	***D18***	***150***

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 01/09/2018 has revealed that there are 2 ROD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DEL AMO	***DEL AMO BLVD AND VER***	***W 1/2 - 1 (0.756 mi.)***	***0***	***28***
MONTROSE CHEMICAL CO	***20201 SOUTH NORMANDI***	***S 1/2 - 1 (0.558 mi.)***	***0***	***72***

CONSENT: Major Legal settlements that establish responsibility and standards for cleanup at NPL (superfund) sites. Released periodically by U.S. District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MONTROSE CHEMICAL CO	***20201 SOUTH NORMANDI***	***S 1/2 - 1 (0.558 mi.)***	***0***	***72***

CA BOND EXP. PLAN: Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there are 2 CA BOND EXP. PLAN sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAL COMPACT LANDFILL	20300 SOUTH MAIN STR	SW 1/2 - 1 (0.596 mi.)	S91	369
GARDENA VALLEY LANDF	***CHICO AND DOMINGUEZ***	***SE 1/2 - 1 (0.842 mi.)***	***102***	***539***

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 9 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MR. JAY'S CLEANERS	20232 S AVALON BLVD	SSE 1/8 - 1/4 (0.139 mi.)	D14	148
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				
MR. JAY CLEANERS	20232 S AVALON BLVD	SSE 1/8 - 1/4 (0.139 mi.)	D15	148
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				
MR JAY CLEANERS, CHI	20232 S AVALON BLVD	SSE 1/8 - 1/4 (0.139 mi.)	D16	149
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				
MR JAY CLEANERS	***20232 S AVALON BLVD***	***SSE 1/8 - 1/4 (0.139 mi.)***	***D18***	***150***
Database: DRYCLEANERS, Date of Government Version: 03/27/2018 EPA Id: CAL000224304 EPA Id: CAD982471245				
NAT'S CLEANERS	641 E UNIVERSITY DR	NE 1/8 - 1/4 (0.190 mi.)	E24	166
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				
NAT'S CLEANERS	***641 E UNIVERSITY DR***	***NE 1/8 - 1/4 (0.190 mi.)***	***E25***	***167***
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				
NAT'S CLEANERS, OKBA	641 E UNIVERSITY DR	NE 1/8 - 1/4 (0.190 mi.)	E26	167
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				

Lower Elevation	Address	Direction / Distance	Map ID	Page
CARSON PLAZA-NATS CL	***641 E UNIVERSITY DR***	***NE 1/8 - 1/4 (0.190 mi.)***	***E27***	***168***
Database: DRYCLEANERS, Date of Government Version: 03/27/2018 EPA Id: CAL000372016				
NAT'S CLEANERS	641 E UNIVERSITY DR	NE 1/8 - 1/4 (0.190 mi.)	E28	170
Database: DRYCLEAN SOUTH COAST, Date of Government Version: 03/16/2018				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 14 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DOMINGUEZ GOLF COURS	***19800 S. MAIN STREET***	***WSW 1/4 - 1/2 (0.485 mi.)***	***P84***	***284***
Reg Id: I-16281				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ART PAUL SVC	***20240 AVALON***	***SSE 1/8 - 1/4 (0.194 mi.)***	***G30***	***171***
Reg Id: 370 Reg Id: I-06340				
SHELL #204-1312-0609	***20223 AVALON BLVD***	***SSE 1/8 - 1/4 (0.197 mi.)***	***F36***	***186***
Reg Id: 907460034				
UNOCAL #5651	***20315 AVALON BLVD***	***SSE 1/8 - 1/4 (0.236 mi.)***	***H43***	***195***
Reg Id: I-02867				
EXXON #7-3173	***20320 AVALON BLVD E***	***SSE 1/8 - 1/4 (0.248 mi.)***	***G49***	***201***
Reg Id: I-00045				
GOODYEAR AIRSHIP OPE	***19200 MAIN***	***WNW 1/4 - 1/2 (0.289 mi.)***	***I53***	***207***
Reg Id: R-13099				
CARSON CITY TOWING S	***19135 MAIN ST S***	***WNW 1/4 - 1/2 (0.312 mi.)***	***J61***	***223***
Reg Id: R-10383				
VENUS LABORATORIES	***18903 SOUTH MAIN STR***	***NW 1/4 - 1/2 (0.326 mi.)***	***K63***	***227***
Reg Id: 19280813				
UNOCAL #2529	***600 CARSON ST W***	***SSE 1/4 - 1/2 (0.350 mi.)***	***L68***	***240***
Reg Id: I-06264				
MOBIL #11-MBT	***655 CARSON ST E***	***SSE 1/4 - 1/2 (0.357 mi.)***	***L70***	***245***
Reg Id: I-00062				
THRIFTY #267 (FORMER	***18523 AVALON***	***NNE 1/4 - 1/2 (0.360 mi.)***	***M72***	***261***
Reg Id: I-05581				
DOMINGUEZ CAR WASH	***20651 AVALON BLVD***	***SSE 1/4 - 1/2 (0.442 mi.)***	***O76***	***266***
Reg Id: I-06566				
FIRESTONE TIRE CO	20707 AVALON	SSE 1/4 - 1/2 (0.482 mi.)	O83	284
Reg Id: I-05219				
SALCO	***19204 S FIGUEROA***	***W 1/4 - 1/2 (0.485 mi.)***	***R85***	***338***
Reg Id: I-01463				

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

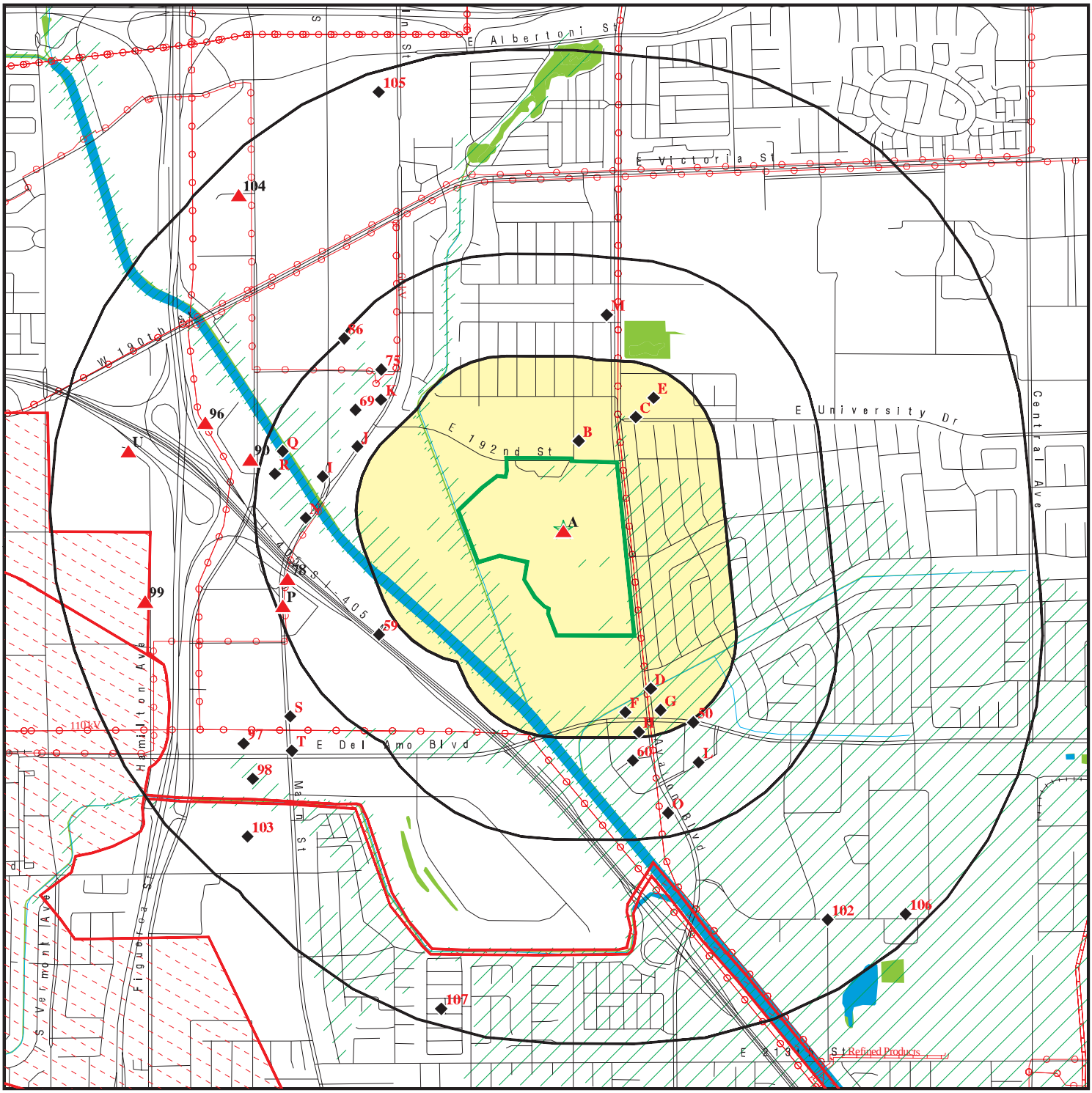
Lower Elevation	Address	Direction / Distance	Map ID	Page
VICS SHELL SERVICE	605 E 190TH STREET	NNE 0 - 1/8 (0.120 mi.)	C10	138

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 13 records.

Site Name	Database(s)
GIANT CLEANERS	DRYCLEANERS
ALCO PACIFIC INC.	SEMS-ARCHIVE, CORRACTS, RCRA NonGen / NLR
SOUTHWEST STEEL ROLLING MILLS	SWF/LF
BROADWAY - MAIN LANDFILL	SWF/LF
KATZ DUMP	SWF/LF
MARTIN HALLEMAN	SWF/LF
BROWN DUMP	SWF/LF
ROSE WILLIAMS LANDFILL	SWF/LF
MCMILLEN OIL FIELD	CPS-SLIC
GARDENA VALLEY LANDFILL NOS. 1 AND	CA BOND EXP. PLAN
GOLDEN EAGLE REFINERY	CA BOND EXP. PLAN
DEL AMO BOULEVARD	CA BOND EXP. PLAN
TED HAMMETT (CARSON)	ENVIROSTOR

OVERVIEW MAP - 5315435.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Former BKK Carson Dump ADDRESS: 340 East 192 Street Carson CA 90746 LAT/LONG: 33.854268 / 118.268449	CLIENT: GeoSyntec Consultants CONTACT: Steven Phillips INQUIRY #: 5315435.2s DATE: May 30, 2018 1:31 pm

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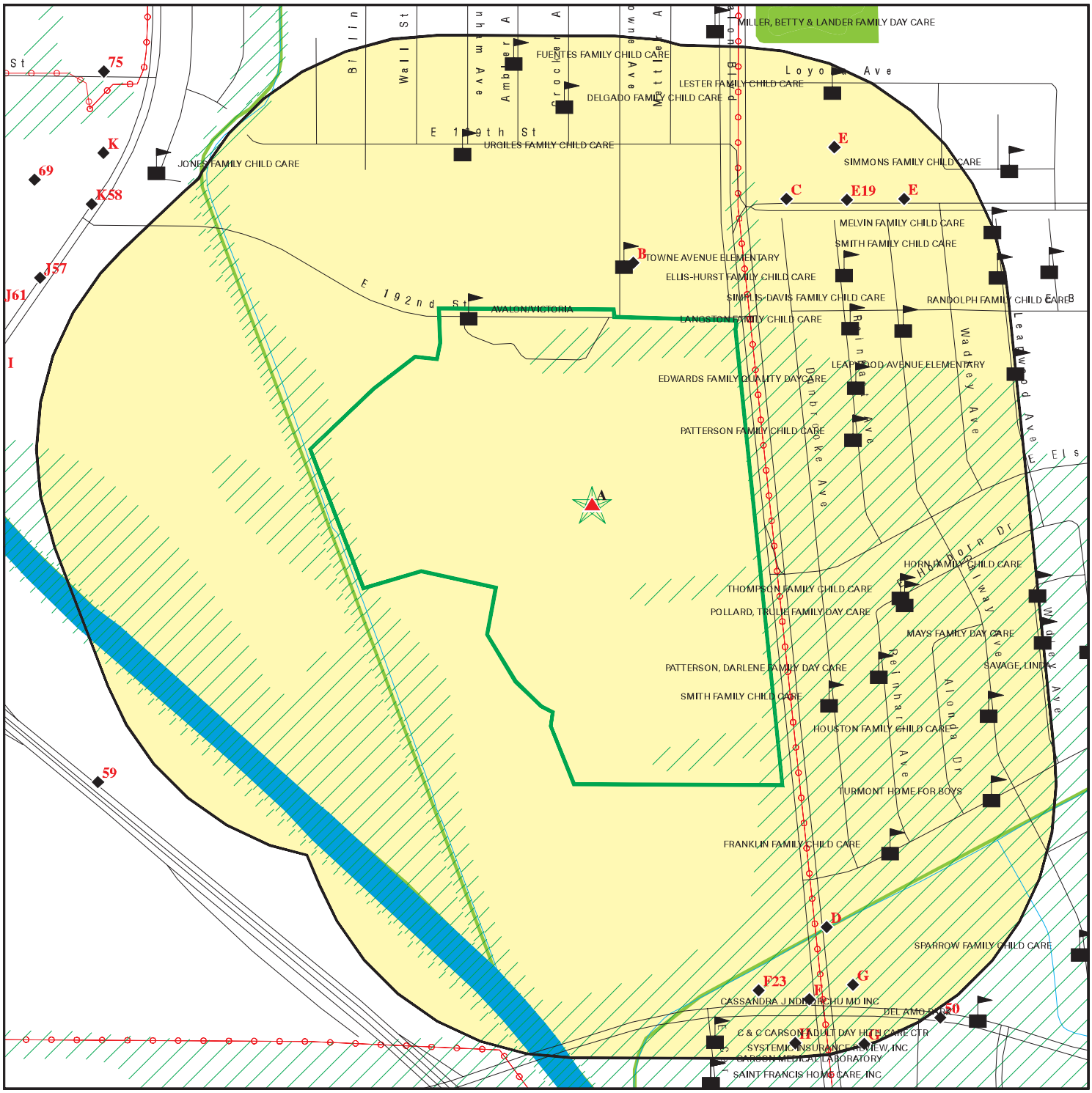
DETAIL MAP - 5315435.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Former BKK Carson Dump	CLIENT:	GeoSyntec Consultants
ADDRESS:	340 East 192 Street Carson CA 90746	CONTACT:	Steven Phillips
		INQUIRY #:	5315435.2s
LAT/LONG:	33.854268 / 118.268449	DATE:	May 30, 2018 1:34 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	2	NR	2
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500	1	0	0	0	NR	NR	1
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	2	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		2	1	NR	NR	NR	3
RCRA-SQG	0.250		0	3	NR	NR	NR	3
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000	1	0	0	0	1	NR	2
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000	1	1	1	6	17	NR	26
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	12	NR	NR	12
State and tribal leaking storage tank lists								
LUST	0.500	1	0	5	12	NR	NR	18

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	3	5	NR	NR	8
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	5	NR	NR	NR	5
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	1	4	NR	NR	5
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	3	NR	NR	3
SWRCY	0.500		0	1	0	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
AOCONCERN	1.000		0	0	0	0	NR	0
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	3	NR	3
SCH	0.250		1	0	NR	NR	NR	1
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	4	NR	NR	NR	5
HIST UST	0.250	2	1	7	NR	NR	NR	10
CA FID UST	0.250		0	3	NR	NR	NR	3
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	2	NR	2
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	1	NR	1
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	2	NR	2
Cortese	0.500	1	0	0	0	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	9	NR	NR	NR	9
EMI	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500	1	0	4	10	NR	NR	15
LOS ANGELES CO. HMS	0.001	3	0	NR	NR	NR	NR	3
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001	1	0	NR	NR	NR	NR	1
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001	3	0	NR	NR	NR	NR	3
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		16	7	48	54	28	0	153

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **VICTORIA GOLF COURSE** **SEMS** **1000417900**
Target **340 E 192 ST** **LOS ANGELES CO. HMS** **CAD980818926**
Property **CARSON, CA 90746**

Site 1 of 6 in cluster A

Actual:
27 ft.

SEMS:

Site ID:	902097
EPA ID:	CAD980818926
Cong District:	32
FIPS Code:	6037
Latitude:	Not reported
Longitude:	Not reported
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Other Cleanup Activity: State-Lead Cleanup

SEMS Detail:

Region:	9
Site ID:	902097
EPA ID:	CAD980818926
Site Name:	VICTORIA GOLF COURSE
NPL:	N
FF:	N
OU:	0
Action Code:	ES
Action Name:	ESI
SEQ:	1
Start Date:	2000-10-31 00:00:00
Finish Date:	9/30/2001
Qual:	G
Current Action Lead:	EPA Perf

Region:	9
Site ID:	902097
EPA ID:	CAD980818926
Site Name:	VICTORIA GOLF COURSE
NPL:	N
FF:	N
OU:	0
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	Not reported
Finish Date:	9/8/1989
Qual:	H
Current Action Lead:	EPA Perf

Region:	9
Site ID:	902097
EPA ID:	CAD980818926
Site Name:	VICTORIA GOLF COURSE
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	11/10/1988

VICTORIA GOLF COURSE (Continued) **1000417900**

Qual: L
Current Action Lead: EPA Perf

Region: 9
Site ID: 902097
EPA ID: CAD980818926
Site Name: VICTORIA GOLF COURSE
NPL: N
FF: N
OU: 0
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1981-06-01 00:00:00
Finish Date: 6/1/1981
Qual: Not reported
Current Action Lead: St Perf

Region: 9
Site ID: 902097
EPA ID: CAD980818926
Site Name: VICTORIA GOLF COURSE
NPL: N
FF: N
OU: 0
Action Code: PA
Action Name: PA
SEQ: 2
Start Date: 1984-08-01 00:00:00
Finish Date: 11/1/1984
Qual: L
Current Action Lead: St Perf

Region: 9
Site ID: 902097
EPA ID: CAD980818926
Site Name: VICTORIA GOLF COURSE
NPL: N
FF: N
OU: 0
Action Code: OO
Action Name: SITE REASS
SEQ: 1
Start Date: Not reported
Finish Date: 6/13/2006
Qual: H
Current Action Lead: St Perf

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 010001-036358
Facility Type: 01
Facility Status: Closed
Area: 22
Permit Number: 000317910

VICTORIA GOLF COURSE (Continued) **1000417900**

Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 026417-035998
Facility Type: 01
Facility Status: Removed
Area: 22
Permit Number: 000312954
Permit Status: Removed

A2 Target Property **VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP)** **FINDS** **1010730665**
340 EAST 192ND STREET **N/A**
CARSON, CA 90746

Site 2 of 6 in cluster A

Actual: 27 ft.

FINDS:

Registry ID: 110033614239

Environmental Interest/Information System
California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

AIR EMISSIONS CLASSIFICATION UNKNOWN

SUPERFUND (NON-NPL)

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A3 Target Property **VICTORIA GOLF COURSE** **HIST UST** **U001562392**
340 E 192ND ST **LOS ANGELES CO. HMS** **N/A**
CARSON, CA 90746 **CIWQS**

Site 3 of 6 in cluster A

Actual: 27 ft.

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000020845
Facility Type: Other
Other Type: GOLF COURSE
Contact Name: L.A. COUNTY MECHANICAL DEPT.
Telephone: 2132672242

VICTORIA GOLF COURSE (Continued) **U001562392**

Owner Name: LOS ANGELES COUNTY MECHANICAL
Owner Address: 1100 N. EASTERN AVE.
Owner City,St,Zip: LOS ANGELES, CA 90063
Total Tanks: 0001

Tank Num: 001
Container Num: #1
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

LOS ANGELES CO. HMS:
Region: LA
Permit Category: T
Facility Id: 010001-036123
Facility Type: 1
Facility Status: Removed
Area: 22
Permit Number: 000311166
Permit Status: Removed

CIWQS:
Agency: Los Angeles Cnty
Agency Address: 301 N Baldwin Ave, Arcadia, CA 91007
Place/Project Type: Construction - Other: Repaving of an Existing Parking Lot
SIC/NAICS: Not reported
Region: 4
Program: CONSTW
Regulatory Measure Status: Terminated
Regulatory Measure Type: Storm water construction
Order Number: 2009-0009-DWQ
WDID: 4 19C356750
NPDES Number: CAS000002
Adoption Date: Not reported
Effective Date: 11/18/2009
Termination Date: 09/02/2010
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: Not reported
Longitude: Not reported

A4 **340 E 192ND STREET** **CIWQS** **S121615756**
Target **340 E 192ND ST** **N/A**
Property **CARSON, CA 90746**

Site 4 of 6 in cluster A

Actual: **27 ft.**

CIWQS:

Agency:	Los Angeles Cnty Parks & Recreation Dept
Agency Address:	301 N Baldwin Ave, Arcadia, CA 91007
Place/Project Type:	Construction - Reconstruction
SIC/NAICS:	Not reported
Region:	4
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	99-08DW
WDID:	4 19C311321
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	07/13/1999
Termination Date:	05/15/2001
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

A5 **VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP)** **RESPONSE** **S101480975**
Target **340 EAST 192ND STREET** **ENVIROSTOR** **N/A**
Property **CARSON, CA 90746** **LUST**
Cortese
Site 5 of 6 in cluster A **HIST CORTESE**
LOS ANGELES CO. HMS
Actual: **27 ft.** **NPDES**
CIWQS

RESPONSE:

Facility ID:	19490191
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	275
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Patrick Hsieh
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Site Code:	401781
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	64
Senate:	35
Special Program Status:	Not reported
Status:	Active
Status Date:	06/09/2006
Restricted Use:	NO
Funding:	Not reported

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Latitude:	33.85287
Longitude:	-118.2715
APN:	NONE SPECIFIED
Past Use:	LANDFILL - CONSTRUCTION, LANDFILL - DOMESTIC, LANDFILL - HAZARDOUS WASTE
Potential COC :	* HYDROCARBON SOLVENTS * OTHER STILL BOTTOM WASTE * AQUEOUS SOLUTION WITH METALS * Sludge - Paint * UNSPECIFIED OIL CONTAINING WASTE * UNSPECIFIED SLUDGE WASTE * OTHER INORGANIC SOLID WASTE Benzene Methane Perchlorate Trichloroethylene (TCE Vinyl chloride
Confirmed COC:	30003-NO 30015-NO 30017-NO 10009-NO 30027-NO 30028-NO
Potential Description:	OTH, SED, SOIL, SV, OTH, SV
Alias Name:	CAD980818926
Alias Type:	EPA Identification Number
Alias Name:	110033614239
Alias Type:	EPA (FRS #)
Alias Name:	400579
Alias Type:	Project Code (Site Code)
Alias Name:	401765
Alias Type:	Project Code (Site Code)
Alias Name:	401781
Alias Type:	Project Code (Site Code)
Alias Name:	19490191
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/15/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	09/09/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	12/06/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	03/07/2013
Comments:	Dispute Resolution correspondence from 2011 to 2013.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Imminent and/or Substantial Endangerment Order
Completed Date:	02/11/2009
Comments:	Enforcement order sent 2/11/09 to seven cities and one home owners association.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Completed Document Type: * Discovery
Completed Date: 10/11/1983
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/02/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 06/22/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/26/2013
Comments: Letter signed 11/26/2013 and mailed out.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 12/31/2012
Comments: 2012 RI/FS Correspondence

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/14/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Site Inspection (SI) Report
Completed Date: 03/10/1998
Comments: Sampled soil and groundwater and used results to prepare an Expanded Site Inspection Report (ESI) per USEPA standards under the PA/SI grant program

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/29/1988
Comments: The 1988 site screening indicated potential contamination issues. DTSC is currently overseeing an RI/FS which was started in December 2006 by potentially responsible parties.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 02/23/1984
Comments: FROM 1948 TO 1959, LDFL WAS ON SITE SLAG & OTHER WASTES SOURCE ACT: 'SUMMARY' BKK, CARSON'BY S.SOLARZ 7/21/82 - REFUSE & WASTE DISP INCLUDING INDUSTRIAL WASTES. FAC TYPE: CLIPPING FROM LA TIMES 7/2/48

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

- CUT & COVER LDFL. INCIDENT: 10/31/57 OPEN FIRE (CITY OF CARSON FILE). WASTE TYPE: REFINERY WASTES, STEEL MILL FINAL STRATEGY THE SITE IS BEING EVALUATED BY DHS.PEU SUBMIT TO EPA PRELIM ASSESS DONE RCRA 3012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 08/22/2006
Comments: Of the seven PRPs that negotiated with DTSC, Los Angeles County signed the Consent Order and Settlement Agreement on May 24, 2006 and the City of Los Angeles signed in August 2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/19/2006
Comments: The RI/FS Workplan was finalized 12/15/2006 and field work commenced the following week. The approval letter is dated 12/19/2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 10/12/2006
Comments: An enforceable order was issued to the five remaining potentially responsible parties that did not sign the consent order in May and August 2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/09/2014
Comments: RI/FS report Approval letter 6/9/2014 for soil and soil gas media

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 06/22/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/31/2012
Comments: 2012 uploaded

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/31/2013
Comments: 2013 Monthly Summary Reports and Data Submittals

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/07/2014
Comments: Not reported

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/31/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/03/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 02/26/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/07/2010
Comments: Final copy e-mailed and sent regular mail 10/7/2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/18/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/09/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/08/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/13/2011
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2018
Future Area Name: PROJECT WIDE

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Design/Implementation Workplan
Future Due Date: 2018
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Facility ID: 19490191
Status: Active
Status Date: 06/09/2006
Site Code: 401781
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 275
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Patrick Hsieh
Supervisor: Robert Senga
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.85287
Longitude: -118.2715
APN: NONE SPECIFIED
Past Use: LANDFILL - CONSTRUCTION, LANDFILL - DOMESTIC, LANDFILL - HAZARDOUS WASTE
Potential COC: * HYDROCARBON SOLVENTS * OTHER STILL BOTTOM WASTE * AQUEOUS SOLUTION WITH METALS * Sludge - Paint * UNSPECIFIED OIL CONTAINING WASTE * UNSPECIFIED SLUDGE WASTE * OTHER INORGANIC SOLID WASTE Benzene Methane Perchlorate Trichloroethylene (TCE Vinyl chloride
Confirmed COC: 30003-NO 30015-NO 30017-NO 10009-NO 30027-NO 30028-NO
Potential Description: OTH, SED, SOIL, SV, OTH, SV
Alias Name: CAD980818926
Alias Type: EPA Identification Number
Alias Name: 110033614239
Alias Type: EPA (FRS #)
Alias Name: 400579
Alias Type: Project Code (Site Code)
Alias Name: 401765
Alias Type: Project Code (Site Code)
Alias Name: 401781
Alias Type: Project Code (Site Code)
Alias Name: 19490191
Alias Type: Envirostor ID Number

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/15/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	09/09/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	12/06/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	03/07/2013
Comments:	Dispute Resolution correspondence from 2011 to 2013.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Imminent and/or Substantial Endangerment Order
Completed Date:	02/11/2009
Comments:	Enforcement order sent 2/11/09 to seven cities and one home owners association.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	10/11/1983
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/02/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Notice of Exemption
Completed Date:	06/22/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	11/26/2013
Comments:	Letter signed 11/26/2013 and mailed out.
Completed Area Name:	PROJECT WIDE

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 12/31/2012
Comments: 2012 RI/FS Correspondence

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/14/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Site Inspection (SI) Report
Completed Date: 03/10/1998
Comments: Sampled soil and groundwater and used results to prepare an Expanded Site Inspection Report (ESI) per USEPA standards under the PA/SI grant program

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/29/1988
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Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 02/23/1984
Comments: FROM 1948 TO 1959, LDFL WAS ON SITE SLAG & OTHER WASTES SOURCE ACT: 'SUMMARY' BKK, CARSON'BY S.SOLARZ 7/21/82 - REFUSE & WASTE DISP INCLUDING INDUSTRIAL WASTES. FAC TYPE: CLIPPING FROM LA TIMES 7/2/48 - CUT & COVER LDFL. INCIDENT: 10/31/57 OPEN FIRE (CITY OF CARSON FILE). WASTE TYPE: REFINERY WASTES, STEEL MILL FINAL STRATEGY THE SITE IS BEING EVALUATED BY DHS.PEU SUBMIT TO EPA PRELIM ASSESS DONE RCRA 3012

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 08/22/2006
Comments: Of the seven PRPs that negotiated with DTSC, Los Angeles County signed the Consent Order and Settlement Agreement on May 24, 2006 and the City of Los Angeles signed in August 2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/19/2006
Comments: The RI/FS Workplan was finalized 12/15/2006 and field work commenced the following week. The approval letter is dated 12/19/2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Completed Date: 10/12/2006
Comments: An enforceable order was issued to the five remaining potentially responsible parties that did not sign the consent order in May and August 2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/09/2014
Comments: RI/FS report Approval letter 6/9/2014 for soil and soil gas media

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 06/22/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/31/2012
Comments: 2012 uploaded

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/31/2013
Comments: 2013 Monthly Summary Reports and Data Submittals

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/07/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/31/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/03/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 02/26/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/07/2010

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Comments: Final copy e-mailed and sent regular mail 10/7/2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/18/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/09/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/08/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/13/2011
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Design/Implementation Workplan
Future Due Date: 2018
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Lead Agency: LOS ANGELES COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603704868
Global Id: T0603704868
Latitude: 33.8568756
Longitude: -118.2717053
Status: Completed - Case Closed
Status Date: 02/20/1998

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Case Worker: JOA
RB Case Number: R-09857
Local Agency: LOS ANGELES COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Other Solvent or Non-Petroleum Hydrocarbon
Site History: Not reported

LUST:
Global Id: T0603704868
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603704868
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0603704868
Action Type: Other
Date: 02/20/1998
Action: Leak Reported

Global Id: T0603704868
Action Type: Other
Date: 12/01/1998
Action: Leak Discovery

Global Id: T0603704868
Action Type: Other
Date: 12/17/1997
Action: Leak Stopped

LUST:
Global Id: T0603704868
Status: Open - Case Begin Date
Status Date: 12/17/1997

Global Id: T0603704868
Status: Completed - Case Closed
Status Date: 02/20/1998

LUST REG 4:
Region: 4

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Regional Board:	04	
County:	Los Angeles	
Facility Id:	R-09857	
Status:	Case Closed	
Substance:	Hydrocarbons	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603704868	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	AVALON BLVD	
Enforcement Type:	Not reported	
Date Leak Discovered:	12/1/1998	
Date Leak First Reported:		2/20/1998
Date Leak Record Entered:	3/19/1998	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	12/17/1997	
Date Case Last Changed on Database:		2/20/1998
Date the Case was Closed:		2/20/1998
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		8797.23052397183017195604285
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	LA CO VICTORIA GOLF COURSE	
RP Address:	340 E. 192ND ST., CARSON, CA 90746	
Program:	LUST	
Lat/Long:	33.8569866 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	Not reported	

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

CORTESE:

Region:	CORTESE
Envirostor Id:	19490191
Site/Facility Type:	STATE RESPONSE
Cleanup Status:	ACTIVE
Status Date:	06/09/2006
Site Code:	400579, 401765, 401781, 401820
Latitude:	33.852870
Longitude:	-118.27151
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	envirostor
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Haz Waste & Substances Sites

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	R-09857

LOS ANGELES CO. HMS:

Region:	LA
Permit Category:	T
Facility Id:	010001-009857
Facility Type:	0
Facility Status:	Removed
Area:	22
Permit Number:	00001184T
Permit Status:	Removed

Region:	LA
Permit Category:	T
Facility Id:	010001-009857
Facility Type:	0
Facility Status:	Removed
Area:	22
Permit Number:	0000T1184
Permit Status:	Removed

NPDES:

Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	457740
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

Place Id:	Not reported
WDID:	4 19C373439
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/15/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Greeway Consulting LLC
Discharge Address:	1547 Palos Verdes Dr Unit 191
Discharge City:	Walnut Creek
Discharge State:	California
Discharge Zip:	94597
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	457740
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C373439
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	07/09/2015
PROCESSED DATE:	07/15/2015
STATUS CODE NAME:	Active
STATUS DATE:	07/15/2015
PLACE SIZE:	6.7
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Marc Logan
FACILITY CONTACT TITLE:	Vice President
FACILITY CONTACT PHONE:	925-708-2429
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	mlogan@greenwaygolf.com
OPERATOR NAME:	Greeway Consulting LLC
OPERATOR ADDRESS:	1547 Palos Verdes Dr Unit 191
OPERATOR CITY:	Walnut Creek
OPERATOR STATE:	California
OPERATOR ZIP:	94597
OPERATOR CONTACT NAME:	Marc Logan
OPERATOR CONTACT TITLE:	Vice President
OPERATOR CONTACT PHONE:	925-708-2429
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	mlogan@greenwaygolf.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Greeway Consulting LLC
DEVELOPER ADDRESS:	1547 Palos Verdes Dr Unit 191
DEVELOPER CITY:	Walnut Creek
DEVELOPER STATE:	California

VICTORIA GOLF COURSE (FORMER BKK CARSON DUMP) (Continued) **S101480975**

DEVELOPER ZIP:	94597
DEVELOPER CONTACT NAME:	Marc Logan
DEVELOPER CONTACT TITLE:	Vice President
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	Y
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N
CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	N
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	N
CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Dominguez Channel Estuary
CERTIFIER NAME:	Marc Logan
CERTIFIER TITLE:	Vice President
CERTIFICATION DATE:	09-JUL-15
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

CIWQS:

Agency:	Greeway Consulting LLC
Agency Address:	1547 Palos Verdes Dr Unit 191, Walnut Creek, CA 94597
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported
Region:	4
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	4 19C373439
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	07/15/2015
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.8525
Longitude:	-118.26972

A6 **VICTORIA GOLF COURSE** **HIST UST** **S118416764**
Target **340 E 192 ST** **N/A**
Property **CARSON, CA 90063**

Site 6 of 6 in cluster A

Actual: **27 ft.**

HIST UST:

File Number:	00027802
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00027802.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

NPL **DEL AMO** **NPL** **1000483853**
Region **DEL AMO BLVD AND VERMONT AVE** **SEMS** **CAD029544731**
West **LOS ANGELES, CA 90006** **US ENG CONTROLS**
1/2-1 **US INST CONTROL**
3991 ft. **ENVIROSTOR**
HIST Cal-Sites
DEED
ROD
PRP
Cortese
HIST CORTESE

NPL:

EPA ID:	CAD029544731
Cerclis ID:	901293
EPA Region:	9
Federal:	N
Final Date:	2002-09-05 00:00:00
Site Score:	47.119999999999997
Latitude:	33.846639000000003
Longitude:	-118.289472

Site Details:

Site Name:	DEL AMO
Site Status:	Final
Site Zip:	90006
Site City:	LOS ANGELES
Site State:	CA

DEL AMO (Continued) **1000483853**

Federal Site: No
Site County: LOS ANGELES
EPA Region: 09
Date Proposed: 12/01/00
Date Deleted: Not reported
Date Finalized: 09/05/02

Substance Details:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: C049
Substance: ETHYLBENZENE
CAS #: 100-41-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U019
Substance: BENZENE
CAS #: 71-43-2
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U019
Substance: BENZENE
CAS #: 71-43-2
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U135
Substance: HYDROGEN SULFIDE
CAS #: 7783-06-4
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U165
Substance: NAPHTHALENE
CAS #: 91-20-3
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U165
Substance: NAPHTHALENE
CAS #: 91-20-3
Pathway: GROUND WATER PATHWAY
Scoring: 4

DEL AMO (Continued) **1000483853**

Summary Details:

Conditions at Proposal December 1, 2000): The Del Amo site should be placed on the National Priorities List NPL) because contaminated ground water beneath the site could effect water that people drink. The Del Amo site is located within the LosAngeles city limits, Los Angeles County, California, in proximity to the Cities of Torrance and Carson. From the early 1940s to the early 1970s, a 280-acre synthetic rubber manufacturing facility operated on the property. The facility consisted ofthe following three plants: a butidiene plant, a styrene plant, and a copolymer plant. The facility was dismantled in the early to mid 1970s, and the property is currently occupied by a business park. The Montrose Chemical Corporation NPL site islocated approximately 600 feet west of the Del Amo site. The 1998 Final Groundwater Remedial Investigation Report identified the following 12 areas of concern for ground water contamination on the Del Amo site: 1) cyclohexane tanks associatedwith the former copolymer plant in the northern portion of the site, 2) pits and trenches in the former copolymer plant area, 3) XMW-20 non-aqueous phase liquid NAPL) in the former styrene plant area in the western portion of the site, 4) volatileorganic compound VOC) tanks associated with the former styrene finishing/ben ene purification unit, 5) VOC tanks and/or pipelines associated with the former styrene finishing unit, 6) tank farm in the former styrene plant area, 7) VOC storage tanksassociated with the former ethylben ene production unit number 1, 8) VOC storage tanks associated with the former ethylben ene production unit number 2, 9) utility tanks in the former styrene plant area, 10) waste pit area and underground petroleumpipelines in the southern portion of the site, 11) underground ben ene pipeline in the southeast portion of the site, and 12) laboratory underground pipelines in the former butadiene plant area in the eastern portion of the site. The Del Amo HRS Documentation Record focuses on two of these 12 areas of concern the XMW-20 NAPL and the waste pit area). The XMW-20 NAPL is composed primarily of ben ene 90 percent) with lesser quantities of toluene, ethylben ene, and styrene. It is locatedapproximately 50 feet from the historic location of a 500,000-gallon crude ben ene storage tank and extends laterally over an area of approximately 17,500 feet. The NAPL is limited to the saturated one, occurring as isolated blobs in a smear onethat extends vertically from the water table, at approximately 60 feet below ground surface, to 30 feet below the water table. The waste pit area occupies approximately 3.7 acres in the southern portion of the site and consists of six disposalpits Pits 2A through 2F) and two evaporation ponds Ponds 1B and 1C). The pits and ponds received process wastes from the styrene manufacturing plant. The pits and ponds are currently covered with fill material, weeds, and miscellaneous debris, and the 3.7-acre parcel is surrounded by a double row of fences. Ha ardous substances in the waste remaining in the pits and ponds include ben ene, ethylben ene, and naphthalene. The pits and ponds are evaluated as two separate sources in the Del Amo HRS Documentation Record. Ground water proximal to the XMW-20 NAPL is contaminated with ben ene at concentrations up to 1,200,000 ug/L. Soils located beneath the waste pit area have come to be located below the top of the water table, dueto rising ground water levels. These soils are contaminated with the same ha ardous substances that are found in the waste remaining in the pits e.g., ben ene, ethylben ene, and naphthalene). There are 17 municipal drinking water wells within 4 miles of the Del Amo site. Status September 2002): EPA is considering various alternatives for this site. The description of the site release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices. For more information about the ha ardous substances identified in this narrative summary, including general information

DEL AMO (Continued) **1000483853**

regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1- 888-42-ATSDR or 1-888-422-8737.

Site Status Details:
NPL Status: Final
Proposed Date: 12/01/2000
Final Date: 09/05/2002
Deleted Date: Not reported

Narratives Details:
NPL Name: DEL AMO
City: LOS ANGELES
State: CA

SEMS:
Site ID: 901293
EPA ID: CAD029544731
Cong District: 37
FIPS Code: 6037
Latitude: 33.846639000000003
Longitude: -118.289472
FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1984-01-01 00:00:00
Finish Date: 1/1/1984
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1991-07-29 00:00:00
Finish Date: 7/29/1991

DEL AMO (Continued) **1000483853**

Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: CR
Action Name: CI
SEQ: 1
Start Date: 1992-05-07 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: NP
Action Name: PROPOSED
SEQ: 3
Start Date: 2000-12-01 00:00:00
Finish Date: 12/1/2000
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1980-04-01 00:00:00
Finish Date: 4/1/1980
Qual: L
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: CR
Action Name: CI

DEL AMO (Continued) **1000483853**

SEQ: 2
Start Date: 2010-01-19 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: FE
Action Name: 5 YEAR
SEQ: 1
Start Date: 2005-09-22 00:00:00
Finish Date: 9/22/2005
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: ES
Action Name: ESI
SEQ: 1
Start Date: 1989-08-07 00:00:00
Finish Date: 8/7/1989
Qual: G
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 3
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 1998-06-02 00:00:00
Finish Date: 6/2/1998
Qual: OR
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N

DEL AMO (Continued) **1000483853**

OU:	0
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1997-09-25 00:00:00
Finish Date:	9/25/1997
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	3
Action Code:	RO
Action Name:	ROD
SEQ:	3
Start Date:	1999-03-30 00:00:00
Finish Date:	3/30/1999
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	3
Action Code:	CO
Action Name:	RI/FS
SEQ:	1
Start Date:	1997-08-14 00:00:00
Finish Date:	3/30/1999
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	0
Action Code:	FE
Action Name:	5 YEAR
SEQ:	5
Start Date:	2014-10-01 00:00:00
Finish Date:	9/24/2015
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731

DEL AMO (Continued) **1000483853**

Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	0
Action Code:	CR
Action Name:	CI
SEQ:	3
Start Date:	2011-03-29 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1979-11-01 00:00:00
Finish Date:	11/1/1979
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	0
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1992-09-01 00:00:00
Finish Date:	9/1/1992
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	1
Action Code:	RO
Action Name:	ROD
SEQ:	4
Start Date:	2011-09-30 00:00:00
Finish Date:	9/30/2011
Qual:	R
Current Action Lead:	EPA Perf

DEL AMO (Continued) **1000483853**

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: FE
Action Name: 5 YEAR
SEQ: 2
Start Date: 2010-09-24 00:00:00
Finish Date: 9/24/2010
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 3
Action Code: RD
Action Name: RD
SEQ: 1
Start Date: 1999-08-01 00:00:00
Finish Date: 9/18/2003
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: AR
Action Name: ADMIN REC
SEQ: 2
Start Date: 2000-07-24 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: NF
Action Name: NPL FINL
SEQ: 2
Start Date: 2002-09-05 00:00:00
Finish Date: 9/5/2002

DEL AMO (Continued) **1000483853**

Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: TW
Action Name: WITHDRAWN
SEQ: 1
Start Date: 1999-02-19 00:00:00
Finish Date: 2/19/1999
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: NP
Action Name: PROPOSED
SEQ: 2
Start Date: 1996-06-17 00:00:00
Finish Date: 6/17/1996
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: MA
Action Name: ST COOP
SEQ: 1
Start Date: 1991-09-30 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 2
Action Code: RO
Action Name: ROD

DEL AMO (Continued) **1000483853**

SEQ: 1
Start Date: 1997-09-05 00:00:00
Finish Date: 9/5/1997
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: TG
Action Name: TA GRANT
SEQ: 1
Start Date: 2001-09-28 00:00:00
Finish Date: 3/31/2003
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 2
Action Code: BE
Action Name: PRP RD
SEQ: 2
Start Date: 1998-05-26 00:00:00
Finish Date: 5/3/1999
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 2
Action Code: BF
Action Name: PRP RA
SEQ: 2
Start Date: 1999-05-18 00:00:00
Finish Date: 5/16/2000
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N

DEL AMO (Continued) **1000483853**

OU: 1
Action Code: BE
Action Name: PRP RD
SEQ: 1
Start Date: 2015-08-25 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 3
Action Code: BF
Action Name: PRP RA
SEQ: 3
Start Date: 2012-09-19 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 1
Action Code: BD
Action Name: PRP RI/FS
SEQ: 2
Start Date: 1992-05-07 00:00:00
Finish Date: 9/30/2011
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 2
Action Code: BE
Action Name: PRP RD
SEQ: 3
Start Date: 1998-05-26 00:00:00
Finish Date: 9/28/2005
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731

DEL AMO (Continued) **1000483853**

Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	2
Action Code:	BF
Action Name:	PRP RA
SEQ:	4
Start Date:	2005-09-28 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	2
Action Code:	OM
Action Name:	OM
SEQ:	1
Start Date:	2000-05-16 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	3
Action Code:	BE
Action Name:	PRP RD
SEQ:	4
Start Date:	2003-09-18 00:00:00
Finish Date:	9/19/2012
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	9
Site ID:	901293
EPA ID:	CAD029544731
Site Name:	DEL AMO
NPL:	F
FF:	N
OU:	3
Action Code:	OM
Action Name:	OM
SEQ:	2
Start Date:	1998-09-30 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

DEL AMO (Continued) **1000483853**

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 2
Action Code: BD
Action Name: PRP RI/FS
SEQ: 1
Start Date: 1992-05-07 00:00:00
Finish Date: 9/5/1997
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 3
Action Code: BD
Action Name: PRP RI/FS
SEQ: 3
Start Date: 1995-10-28 00:00:00
Finish Date: 8/14/1997
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 901293
EPA ID: CAD029544731
Site Name: DEL AMO
NPL: F
FF: N
OU: 0
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1981-06-01 00:00:00
Finish Date: 1/1/1984
Qual: H
Current Action Lead: St Perf

US ENG CONTROLS:
EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Actual Date: 09/30/2011
Contact Name: Not reported

DEL AMO (Continued) **1000483853**

Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: Explanation Of Significant Differences
Action Completion date: 08/13/2002
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: Explanation Of Significant Differences
Action Completion date: 08/24/2006
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Air
Engineering Control: Air Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Cap
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02

DEL AMO (Continued) **1000483853**

Contaminated Media : Soil
Engineering Control: Impermeable Barrier
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Operations & Maintenance (O&M)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: Surface Drainage Control
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: 09/05/1997
Operable Unit: 02
Contaminated Media : Surface Water
Engineering Control: Surface Water Control
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003

DEL AMO (Continued) **1000483853**

Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Air Stripping
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Carbon Adsorption
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Containment, (N.O.S.)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Discharge
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported

DEL AMO (Continued) **1000483853**

Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Natural Attenuation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Precipitation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Reinjection
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2011
Operable Unit: 01
Contaminated Media : Free-phase NAPL
Engineering Control: In-Situ Chemical Oxidation (ISCO)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Cap
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil

DEL AMO (Continued) **1000483853**

Engineering Control: Impermeable Barrier
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Operations & Maintenance (O&M)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil Gas
Engineering Control: Vapor Intrusion Pathway Mitigation, (N.O.S)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

US INST CONTROL:
EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Access Restriction, Fencing
Actual Date: 09/30/1997
Complet. Date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293

DEL AMO (Continued) **1000483853**

Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 09/30/1997
Complet. Date: 09/05/1997
Operable Unit: 02
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Drilling Restriction
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE

DEL AMO (Continued) **1000483853**

LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Notices to State Regulators Before Changes in Land Ownership
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Water Supply Use Restriction
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 09/30/2011
Complet. Date: 09/30/2011
Operable Unit: 01
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES

DEL AMO (Continued) **1000483853**

Event Code: Not reported
Inst. Control: Building, demolition, or excavation regulation
Actual Date: 09/30/2011
Complet. Date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 09/30/2011
Complet. Date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD029544731
Site ID: 0901293
Name: DEL AMO
Action Name: RECORD OF DECISION
Address: DEL AMO BLVD AND VERMONT AVE
LOS ANGELES, CA 90006
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Internet Announcement
Actual Date: 09/30/2011
Complet. Date: 09/30/2011
Operable Unit: 01
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

ENVIROSTOR:
Facility ID: 19300230
Status: Active
Status Date: 04/22/1996
Site Code: 401628
Site Type: Federal Superfund
Site Type Detailed: State Response or NPL
Acres: 280
NPL: YES
Regulatory Agencies: SMBRP
Lead Agency: SMBRP

DEL AMO (Continued) **1000483853**

Program Manager: Safouh Sayed
Supervisor: Robert Senga
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: Not reported
Restricted Use: YES
Site Mgmt Req: REM, DAY, ELD, HOS, LUC, FEN, MON, NUSE, RES
Funding: Responsible Party
Latitude: 33.8497
Longitude: -118.292
APN: NONE SPECIFIED
Past Use: MANUFACTURING - OTHER
Potential COC: * HYDROCARBON SOLVENTS * UNSPECIFIED AQUEOUS SOLUTION * UNSPECIFIED SOLVENT MIXTURES
Confirmed COC: NONE SPECIFIED
Potential Description: AQUI, WELL
Alias Name: CADILLAC-FAIRVIEW
Alias Type: Alternate Name
Alias Name: DEL AMO BOULEVARD
Alias Type: Alternate Name
Alias Name: 110033617548
Alias Type: EPA (FRS #)
Alias Name: P41013
Alias Type: PCode
Alias Name: 400048
Alias Type: Project Code (Site Code)
Alias Name: 400851
Alias Type: Project Code (Site Code)
Alias Name: 401628
Alias Type: Project Code (Site Code)
Alias Name: 19300230
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 08/23/2005
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/01/2011
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 12/04/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/17/2016
Comments: Not reported

DEL AMO (Continued) **1000483853**

Completed Area Name:	OU 3
Completed Sub Area Name:	Dual Phase Montrose/Del Amo
Completed Document Type:	Consent Decree
Completed Date:	06/22/2012
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	12/18/2017
Comments:	Not reported

Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/29/2012
Comments:	Not reported

Completed Area Name:	OU 3
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	12/26/2012
Comments:	Complete

Completed Area Name:	OU 2
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction
Completed Date:	09/27/2000
Comments:	Land Use Covenant signed and recorded on 9/27/00 for the Pits operable unit.

Completed Area Name:	OU 2
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	05/03/1999
Comments:	Not reported

Completed Area Name:	OU 2
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	05/05/1998
Comments:	Unilateral Administrative Order for Remedial Design for the Del Amo Superfund site. The Pits are an operable unit of the larger 280 acre site.

Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Order
Completed Date:	05/07/1992
Comments:	U.S. EPA Consent Order signed. Collected $440,000 as cost recovery for past costs and all future oversight costs, to be billed to RP.

Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Consent Order
Completed Date:	03/31/1988
Comments:	Not reported

DEL AMO (Continued) **1000483853**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 12/26/2012
Comments: Complete

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Consent Decree
Completed Date: 01/14/2016
Comments: Not reported

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/22/2013
Comments: Complete

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/22/2013
Comments: Completed

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/26/2009
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/17/2003
Comments: Completed PEA-equivalent document for proposed park area adjacent to the Del Amo Study Area.

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/15/2009
Comments: U.S. EPA filed an Explanation of Significant Difference (ESD) for the Del Amo Pits treatment technology for the SVE System.

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 09/15/1997
Comments: Based on U.S. EPA decision to conduct a pilot test on an alternative SVE treatment technology, RP submitted workplan.

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision
Completed Date: 10/10/2011
Comments: Not reported

DEL AMO (Continued) **1000483853**

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 05/03/1999
Comments: Dropped RAO commitment because U.S. EPA is taking over enforcement.

Completed Area Name: OU 3
Completed Sub Area Name: Dual Phase Montrose/Del Amo
Completed Document Type: Remedial Action Plan
Completed Date: 03/30/1999
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 02/28/2010
Comments: Completed

Completed Area Name: OU 3
Completed Sub Area Name: Dual Phase Montrose/Del Amo
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 05/20/1998
Comments: Completion of Remedial Investigation for the Groundwater Operable Unit, dated 5/5/98; and the Joint Groundwater Feasibility Study, dated 5/18/98, for the Del Amo Study Area, Groundwater Operable Unit, U.S. EPA Superfund site.

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 12/11/1996
Comments: The RI/FS for the Del Amo Pits Area (OU1) was approved. (U.S. EPA lead).

Completed Area Name: OU 3
Completed Sub Area Name: Dual Phase Montrose/Del Amo
Completed Document Type: Removal Action Completion Report
Completed Date: 01/15/1993
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: *Engineering Evaluation / Cost Analysis - Non-Time Critical
Completed Date: 12/31/1991
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 06/30/1989
Comments: Site Screening Done: U.S. EPA Lead. U.S. EPA will list site. Former synthetic rubber manufacturing plant. Contaminants include PAH's such as benzene, toluene, ethylbenzene, and PNAs.

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan

DEL AMO (Continued) **1000483853**

Completed Date:	03/31/1988
Comments:	Not reported
Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	08/04/2007
Comments:	The purposes of the RI were to evaluate the nature and extent of NAPL and soils contaminants at the site and to provide sufficient data for completion of the Baseline Risk Assessment and Feasibility study. Also, the objective of the RI was to identify and evaluate likely contaminant sources areas. Based on those investigations, it was concluded that Benzene is a primary contaminant at some of the sources areas.
Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Proposed Plan
Completed Date:	09/09/2011
Comments:	Not reported
Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	05/05/2012
Comments:	Complete
Completed Area Name:	OU 3
Completed Sub Area Name:	Dual Phase Montrose/Del Amo
Completed Document Type:	Feasibility Study Report
Completed Date:	03/26/2013
Comments:	Complete
Completed Area Name:	OU 1
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	01/30/2013
Comments:	Complete
Completed Area Name:	OU 3
Completed Sub Area Name:	Dual Phase Montrose/Del Amo
Completed Document Type:	Health & Safety Plan
Completed Date:	02/25/2013
Comments:	Complete
Completed Area Name:	OU 3
Completed Sub Area Name:	Dual Phase Montrose/Del Amo
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	06/09/2013
Comments:	Completed
Completed Area Name:	OU 2
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	04/01/2015
Comments:	Not reported

DEL AMO (Continued) **1000483853**

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 11/18/2015
Comments: Not reported

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 11/18/2015
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/22/2013
Comments: Complete

Completed Area Name: OU 3
Completed Sub Area Name: Dual Phase Montrose/Del Amo
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/22/2013
Comments: Completed

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/19/2014
Comments: Not reported

Completed Area Name: OU 3
Completed Sub Area Name: Dual Phase Montrose/Del Amo
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/19/2014
Comments: Not reported

Completed Area Name: OU 1
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/19/2014
Comments: Not reported

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/01/2011
Comments: Complete

Completed Area Name: OU 2
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 09/14/2011
Comments: Complete

Future Area Name: OU 1
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction

DEL AMO (Continued) **1000483853**

Future Due Date:	2018
Future Area Name:	OU 1
Future Sub Area Name:	Not reported
Future Document Type:	Certification
Future Due Date:	2020
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	5 Year Review Reports
Future Due Date:	2025
Future Area Name:	OU 1
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Report
Future Due Date:	2021
Future Area Name:	OU 1
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2020
Schedule Area Name:	OU 2
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	02/14/2018
Schedule Revised Date:	Not reported

Calsite:

Region:	CYPRESS
Facility ID:	19300230
Facility Type:	NPRP
Type:	NPL SITE, RP-FUNDED
Branch:	SB
Branch Name:	SO CAL - CYPRESS
File Name:	Not reported
State Senate District:	04221996
Status:	ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
NPL:	Listed
SIC Code:	30
SIC Name:	MANU - RUBBER & MISC PLASTICS PRODUCTS
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	SSAYED
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	LA
Region Water Control Board Name:	LOS ANGELES
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	55
State Senate District Code:	28
Facility ID:	19300230
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CNSNT

DEL AMO (Continued) **1000483853**

Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03311988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03311988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE

DEL AMO (Continued) **1000483853**

Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12311991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	I&SE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05071992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0

DEL AMO (Continued) **1000483853**

For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	GW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01151993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL OF BENZENE PRODUCT FROM A GROUNDWATER WELL BEGAN IN FALL 1992.PUMP TESTING, OPERATION AND MAINTENANCE OF THIS WELL WILL CONTINUEUNTIL DATA INDICATES THAT THE OPERATION CAN CEASE.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	PITS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12111996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	GW
Proposed Budget:	0

DEL AMO (Continued) **1000483853**

AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05201998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	STUDY
Proposed Budget:	0
AWP Completion Date:	06302005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	DES
Activity Name:	DESIGN
AWP Code:	STUDY
Proposed Budget:	0
AWP Completion Date:	06302006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

DEL AMO (Continued) **1000483853**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	GW1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03301999
Est Person-Yrs to complete:	0.20000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	DES
Activity Name:	DESIGN
AWP Code:	PITS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05031999
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

DEL AMO (Continued) **1000483853**

Unknown Type:	0
Facility ID:	19300230
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	STUDY
Proposed Budget:	0
AWP Completion Date:	09302005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	PITS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09151997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	PITS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05051998

DEL AMO (Continued) **1000483853**

Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	DES
Activity Name:	DESIGN
AWP Code:	GW1
Proposed Budget:	0
AWP Completion Date:	06302005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	GW1
Proposed Budget:	0
AWP Completion Date:	06302006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

DEL AMO (Continued) **1000483853**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	STUDY
Proposed Budget:	0
AWP Completion Date:	12302007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	PITS
Proposed Budget:	0
AWP Completion Date:	06302005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	ORDER

DEL AMO (Continued) **1000483853**

Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	PITOU
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05031999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	DEED
Activity Name:	DEED RESTRICTIONS
AWP Code:	PITOU
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09272000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	PITS
Proposed Budget:	0
AWP Completion Date:	06302036
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported

DEL AMO (Continued) **1000483853**

Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	STUDY
Proposed Budget:	0
AWP Completion Date:	06302036
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19300230
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	GW1
Proposed Budget:	0
AWP Completion Date:	12312036
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

DEL AMO (Continued) **1000483853**

For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 19300230
Activity: CERT
Activity Name: CERTIFICATION
AWP Code: Not reported
Proposed Budget: 0
AWP Completion Date: 06302008
Revised Due Date: Not reported
Comments Date: Not reported
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 19300230
Activity: PEA
Activity Name: PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code: PARK
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 12172003
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: DEL AMO BLVD BTN VERMONT & NORMANDIE
Alternate City,St,Zip: LOS ANGELES, CA 90502
Alternate Address: DEL AMO BLVD & VERMONT AVE
Alternate City,St,Zip: LOS ANGELES, CA 90020
Background Info: The site consists of waste disposal ponds that were used by a

DEL AMO (Continued) **1000483853**

former synthetic rubber manufacturing complex. The site operated from the 1940's to 1972, when the disposal areas were covered over with soil and later sold to a series of land development corporations. Currently, the site is fenced and posted.
Not reported
The unlined pits were used for chemical waste disposal. Soils and groundwater are contaminated with high concentrations of volatile aromatic hydrocarbons (VAHs) such as benzene, toluene, and ethylbenzene; and polynuclear aromatic hydrocarbons (PNAs). The highest concentrations of these contaminants are found in the soils from the waste pit area. The contaminants in the shallow aquifer, which is not a drinking water source, may possibly migrate to and contaminate the deeper drinking water aquifer.
Not reported
A Consent Order was issued in March 1988, and three potentially responsible parties have completed the remedial investigation and are currently conducting the feasibility study. The Consent Order only addresses the onsite soil contamination and not the groundwater contamination. U.S. EPA has completed a groundwater investigation for the site which concluded that there is hydraulic continuity between the uppermost contaminated aquifer and the local drinking water aquifer within two miles of the site.
Not reported
The site has been split into two operable units. One addresses the pits only, the other addresses the larger study area comprising of soils and groundwater contamination.
Not reported
U.S. EPA approved the dual site groundwater ROD on 3/30/1999 for both the Montrose and Del Amo sites. This ROD addresses the dissolved Monochlorobenzene plume emanating from the Montrose site to approximately Torrance Blvd. to the south. It also addresses the dissolved benzene groundwater plume emanating from the Del Amo site to just south of the Del Amo Pits. The plumes from both sites overlap each other to the east of Montrose and to the west of Del Amo, approximately around Normandie Avenue. These dissolved plumes are referred to as "GW1" in this report. The Montrose remedy consists of a pump and treat system with reinjection of treated water into the groundwater aquifer. The Del Amo remedy consists of intrinsic bioremediation with pumping for containment from the lower unit and subsequent discharge. The LNAPL at the Del Amo site will be dealt with along with the soils remedy, and is noted in this report as the Study Area. The DNAPL at the Montrose site will be evaluated separately and is noted as "GW2" in this report.

Comments Date: 01162003
Comments: Based on U.S. EPA decision to conduct a pilot test on an
Comments Date: 01162003
Comments: alternative SVE treatment technology, RP submitted workplan.
Comments Date: 02112000
Comments: The Pits Cap and SVE System has been implemented. The treatment
Comments Date: 02112000
Comments: technology for the SVE system has not yet been decided upon.
Comments Date: 03011997
Comments: The Remedial Investigation/Feasibility Study Report, "for the
Comments Date: 03011997

DEL AMO (Continued) **1000483853**

Comments:	Pits only," was approved on 12/11/1996. A proposed plan was
Comments Date:	03011997
Comments:	presented to the community on 12/14/96, and the comment
Comments Date:	03011997
Comments:	period ended on 02/13/97. U.S. EPA is preparing the ROD and
Comments Date:	03011997
Comments:	expecting to be completed by 06/30/1997.
Comments Date:	04091999
Comments:	A joint groundwater ROD was signed on 03/30/1999. It addresses
Comments Date:	04091999
Comments:	the dissolved phase contamination (benzene and chlorobenzene)
Comments Date:	04091999
Comments:	for the Del Amo and Montrose sites.
Comments Date:	05051998
Comments:	Unilateral Administrative Order for Remedial Design for the
Comments Date:	05051998
Comments:	Del Amo Superfund site. The Pits are an operable unit of the
Comments Date:	05051998
Comments:	larger 280 acre site.
Comments Date:	05071992
Comments:	U.S. EPA Consent Order signed. Collected $440,000 as cost
Comments Date:	05071992
Comments:	recovery for past costs and all future oversight costs, to be
Comments Date:	05071992
Comments:	billed to RP.
Comments Date:	05071999
Comments:	U.S. EPA has approved the Del Amo Pits Cap Final Design.
Comments Date:	05081999
Comments:	U.S. EPA issued a Unilateral Administrative Order for Remedial
Comments Date:	05081999
Comments:	Action, U.S. EPA Docket #99-08, to Shell Oil Co., Dow Chemical
Comments Date:	05081999
Comments:	Co., Michelin North America and the U.S. General Services
Comments Date:	05081999
Comments:	Administration to implement the Pits remedy.
Comments Date:	05201998
Comments:	Completion of Remedial Investigation for the Groundwater Operable
Comments Date:	05201998
Comments:	Unit, dated 5/5/98; and the Joint Groundwater Feasibility Study,
Comments Date:	05201998
Comments:	dated 5/18/98, for the Del Amo Study Area, Groundwater Operable
Comments Date:	05201998
Comments:	Unit, U.S. EPA Superfund site.
Comments Date:	06301989
Comments:	Site Screening Done: U.S. EPA Lead. U.S. EPA will list site.
Comments Date:	06301989
Comments:	Former synthetic rubber manufacturing plant. Contaminants
Comments Date:	06301989
Comments:	include PAH’s such as benzene, toluene, ethylbenzene, and PNAs.
Comments Date:	07122002
Comments:	U.S. EPA filed an Explanation of Significant Difference (ESD)
Comments Date:	07122002
Comments:	for the Del Amo Pits treatment technology for the SVE System.
Comments Date:	07231991
Comments:	Site proposed for NPL.
Comments Date:	07241991
Comments:	The site size now encompasses 280 acres rather than the

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Comments Date: 07241991
Comments: former 3.7 acres.
Comments Date: 09051997
Comments: The final remedy of the Del Amo Pits Operable Unit consists of a
Comments Date: 09051997
Comments: RCRA-equivalent cap, surface water controls, soil vapor
Comments Date: 09051997
Comments: extraction beneath the pits, fencing, deed restrictions pro-
Comments Date: 09051997
Comments: hibiting future residental use, and long-term operation and
Comments Date: 09051997
Comments: maintenance.
Comments Date: 09271991
Comments: Dropped RAO commitment because U.S. EPA is taking over
Comments Date: 09271991
Comments: enforcement.
Comments Date: 09272000
Comments: Land Use Covenant signed and recorded on 9/27/00 for the Pits
Comments Date: 09272000
Comments: operable unit.
Comments Date: 12012001
Comments: The Health Risk Assessment has been received for review.
Comments Date: 12111996
Comments: The RI/FS for the Del Amo Pits Area (OU1) was approved.
Comments Date: 12111996
Comments: (U.S. EPA lead).
Comments Date: 12172003
Comments: Completed PEA-equivalent document for proposed park area
Comments Date: 12172003
Comments: adjacent to the Del Amo Study Area.
ID Name: CALSTARS CODE
ID Value: 400048
ID Name: BEP DATABASE PCODE
ID Value: P41013
Alternate Name: DEL AMO BOULEVARD
Alternate Name: DEL AMO FACILITY
Alternate Name: CADILLAC-FAIRVIEW
Alternate Name: Not reported
Special Programs Code: Not reported
Special Programs Name: Not reported

DEED:
Envirostor ID: 19300230
Area: OU 2
Sub Area: Not reported
Site Type: FEDERAL SUPERFUND
Status: ACTIVE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): 08/23/2005
File Name: Envirostor Land Use Restrictions

Envirostor ID: 19300230
Area: OU 2
Sub Area: Not reported
Site Type: FEDERAL SUPERFUND
Status: ACTIVE

DEL AMO (Continued) **1000483853**

Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): 09/27/2000
File Name: Envirostor Land Use Restrictions

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

PRP:

PRP name:
CABOT, CABOT, & FORBES
CADILLAC FAIRVIEW/CALIFORNIA INC.
CADILLAC FAIRVIEW/CALIFORNIA INC.
DOW CHEMICAL COMPANY
DOW CHEMICAL COMPANY
GENERAL SERVICES ADMINISTRATION
GENERAL SERVICES ADMINISTRATION
GOODYEAR SYNTHETIC RUBBER CORPORATION
GOODYEAR TIRE & RUBBER CO.
GOODYEAR TIRE COMPANY OF CALIFORNIA
GOODYEAR TIRE COMPANY OF CALIFORNIA
HARDIN, COOK, LOPER, ENGEL & BERGEZ, LLP
MICHELIN NORTH AMERIC INC.
MINNESOTA MINING AND MFG COMPANY
MONTROSE CHEMICAL CORPORATION OF CALIFORNIA
SHELL CHEMICAL COMPANY/SHELL UNION OIL CORPORATION
SHELL CHEMICAL CORPORATION
SHELL CHEMICAL CORPORATION
SHELL OIL COMPANY
SHELL OIL COMPANY
SHELL OIL COMPANY
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SHELL OIL COMPANY
SHELL OIL COMPANY
U.S. GENERAL SERVICE ADMINISTRATION
U.S. GENERAL SERVICE ADMINISTRATION
U.S. GOVERNMENT
U.S. GOVERNMENT
UNIROYAL GOODRICH TIRE COMPANY
UNITED STATES GENERAL SERVICES ADMINISTRATION
UNITED STATES GENERAL SERVICES ADMINISTRATION
USA WASTE SERVICES INC.
WRH INDUSTRIES, INC.

CORTESE:

Region: CORTESE
Envirostor Id: 19300230
Site/Facility Type: FEDERAL SUPERFUND - LISTED
Cleanup Status: ACTIVE - LAND USE RESTRICTIONS
Status Date: 04/22/1996
Site Code: 400048, 400851, 401628
Latitude: 33.8497
Longitude: -118.292
Owner: Not reported
Enf Type: Not reported

DEL AMO (Continued) **1000483853**

Swat R:	Not reported
Flag:	envirostor
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Haz Waste & Substances Sites

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	CALSI
Reg Id:	19300230

NPL
Region
South
1/2-1
2946 ft.

MONTROSE CHEMICAL COMPANY OF CALIFORNIA
20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502

NPL **1000420366**
SEMS **CAD008242711**
RCRA-LQG
US ENG CONTROLS
US INST CONTROL
ROD
PRP
ICIS
CONSENT

NPL:

EPA ID:	CAD008242711
Cerclis ID:	900993
EPA Region:	9
Federal:	N
Final Date:	1989-10-04 00:00:00
Site Score:	32.100000000000001
Latitude:	33.848331000000002
Longitude:	-118.2983

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-> 100 Feet
Category Value:	400

NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value:	100

Site Details:

Site Name:	MONTROSE CHEMICAL CORP.
Site Status:	Final
Site Zip:	90502
Site City:	TORRANCE
Site State:	CA
Federal Site:	No
Site County:	LOS ANGELES
EPA Region:	09
Date Proposed:	10/15/84

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Date Deleted: Not reported
Date Finalized: 10/04/89

Substance Details:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: A023
Substance: DDE
CAS #: 72-55-9
Pathway: AIR PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U060
Substance: DDD
CAS #: 72-54-8
Pathway: AIR PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U061
Substance: DDT
CAS #: 50-29-3
Pathway: AIR PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U061
Substance: DDT
CAS #: 50-29-3
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U061
Substance: DDT
CAS #: 50-29-3
Pathway: SURFACE WATER PATHWAY
Scoring: 3

Summary Details:

Conditions at proposal October 15, 1984): Montrose Chemical Corp. manufactured DDT on a l3-acre site in a light industrial/residential area of Torrance, Los Angeles County, California, from 1947 until 1982. About 3,000 people live or work within 0.25 mile of the site. The company s operations included formulation, grinding, packaging, and distribution of DDT. According to analyses conducted by EPA, Montrose, and various State and local agencies, on- and off-site soils, surface water, and sediments are contaminated with DDT. The major transport mechanisms identified were storm water run-off and aerial emissions. On May 6, 1983, EPA issued an

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Administrative Order under CERCLA Section 106 requiring Montrose Chemical to cease all discharges of DDT and to initiate a study to determine the nature and extent of contamination. After a more detailed review of the Montrose site, EPA determined that further work was necessary to characteri e the site andevaluate alternatives. Therefore, EPA prepared a workplan for a remedial investigation/feasibility study RI/FS). This second phase of investigation will assess all areas of contamination, both on- and off-site, and any public health and environmental impacts. Status June 1986): In February 1985, Montrose installed a temporary asphalt cover over the site. EPA did not endorse this activity. In the summer of 1985, EPA conducted Part I of the RI. On-site sampling foundhigh levels of contamination at 77-foot depths in soil and in shallow ground water. In October 1985, Montrose and EPA signed an Administrative Order under CERCLA Section 106 requiring Montrose to conduct Part II of the RI, which includes on-site sampling of ground water and off-site sampling of soil, sediments, surface water, and ground water. Status November 1988): During July 1986, EPA sampled off-site dust and soil and verified that DDT migrated off-site via aerial dispersion.In November 1986, Montrose completed Phase I sampling under Part II of the RI. Results indicated that soils near the site are contaminated with high levels of DDT, and that the two shallower aquifers in the four-aquifer system underlying the site are contaminated with DDT and monochloroben ene. In October 1987, EPA and Montrose signed an amendment to the October 1985 Administrative Order, calling for both on- and off-site sampling of the two deeper aquifers in the four-aquifer system. Status October 4, 1989): In July 1989, EPA and Montrose signed a second amendment to the original order, under which Montrose will conduct the FS for the overall site and evaluate options for removing DDT-contaminated sediments in the sanitary sewer lines near the site. Sampling conducted under the first amended order indicates that ground water is contaminated with high levels of monochloroben ene 0.25 mile downgradient from the site. Deep wells and additional downgradient wells will be constructed and sampled.

Site Status Details:

NPL Status:	Final
Proposed Date:	10/15/1984
Final Date:	10/04/1989
Deleted Date:	Not reported

Narratives Details:

NPL Name:	MONTROSE CHEMICAL CORP.
City:	TORRANCE
State:	CA

SEMS:

Site ID:	900993
EPA ID:	CAD008242711
Cong District:	Not reported
FIPS Code:	6037
Latitude:	33.848331000000002
Longitude:	-118.2983
FF:	N
NPL:	Currently on the Final NPL
Non NPL Status:	Not reported

SEMS Detail:

Region:	9

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	1
Action Code:	RI
Action Name:	RI
SEQ:	1
Start Date:	1985-01-01 00:00:00
Finish Date:	4/30/1986
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	1989-10-04 00:00:00
Finish Date:	10/4/1989
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	CR
Action Name:	CI
SEQ:	2
Start Date:	1997-08-14 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	1988-06-01 00:00:00
Finish Date:	6/1/1988
Qual:	Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 1991-06-05 00:00:00
Finish Date: 6/5/1991
Qual: V
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: AR
Action Name: ADMIN REC
SEQ: 3
Start Date: 1998-05-01 00:00:00
Finish Date: 6/30/1998
Qual: E
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 1
Action Code: RI
Action Name: RI
SEQ: 2
Start Date: 1998-01-08 00:00:00
Finish Date: 5/18/1998
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: RV
Action Name: RMVL
SEQ: 2

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Start Date: 1994-03-24 00:00:00
Finish Date: 9/30/2009
Qual: S
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: RO
Action Name: ROD
SEQ: 2
Start Date: 1999-03-30 00:00:00
Finish Date: 3/30/1999
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: FE
Action Name: 5 YEAR
SEQ: 1
Start Date: 2013-09-12 00:00:00
Finish Date: 8/28/2014
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1984-04-01 00:00:00
Finish Date: 4/1/1984
Qual: H
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1991-12-11 00:00:00
Finish Date:	12/11/1991
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	MA
Action Name:	ST COOP
SEQ:	2
Start Date:	2010-10-07 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	CR
Action Name:	CI
SEQ:	5
Start Date:	2010-05-19 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	4
Action Code:	PD
Action Name:	SITE SEC
SEQ:	1
Start Date:	2008-08-29 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

NPL:	F
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1980-01-01 00:00:00
Finish Date:	1/1/1980
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	1
Action Code:	TS
Action Name:	TRTSTUDY
SEQ:	1
Start Date:	1992-06-01 00:00:00
Finish Date:	8/12/1994
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1984-04-01 00:00:00
Finish Date:	4/1/1984
Qual:	H
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	RV
Action Name:	RMVL
SEQ:	1
Start Date:	1994-04-11 00:00:00
Finish Date:	6/30/1999
Qual:	C
Current Action Lead:	EPA Perf
Region:	9

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1989-04-30 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1984-10-15 00:00:00
Finish Date:	10/15/1984
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	EE
Action Name:	EE/CA
SEQ:	2
Start Date:	1996-07-09 00:00:00
Finish Date:	9/28/2001
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	3
Action Code:	FS
Action Name:	FS
SEQ:	3
Start Date:	1997-08-14 00:00:00
Finish Date:	3/30/1999
Qual:	Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 1
Action Code: ED
Action Name: R/H ASMT
SEQ: 1
Start Date: 1992-03-01 00:00:00
Finish Date: 5/1/2017
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 1
Action Code: ED
Action Name: R/H ASMT
SEQ: 2
Start Date: 1992-03-01 00:00:00
Finish Date: 5/1/2017
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 2
Action Code: EE
Action Name: EE/CA
SEQ: 3
Start Date: 2008-06-04 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 5
Action Code: RD
Action Name: RD
SEQ: 5

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Start Date:	2009-07-22 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	5
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	6
Start Date:	2004-11-30 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	5
Action Code:	RO
Action Name:	ROD
SEQ:	4
Start Date:	2009-09-30 00:00:00
Finish Date:	9/30/2009
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	5
Action Code:	CO
Action Name:	RI/FS
SEQ:	3
Start Date:	2003-07-17 00:00:00
Finish Date:	5/27/2009
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Action Code:	TA
Action Name:	TECH ASSIST
SEQ:	1
Start Date:	2001-04-03 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	TG
Action Name:	TA GRANT
SEQ:	1
Start Date:	2000-04-07 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	2
Action Code:	RI
Action Name:	RI
SEQ:	3
Start Date:	1985-01-01 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	4
Action Code:	RV
Action Name:	RMVL
SEQ:	5
Start Date:	2007-12-03 00:00:00
Finish Date:	2/21/2008
Qual:	C
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

NPL:	F
FF:	N
OU:	6
Action Code:	CO
Action Name:	RI/FS
SEQ:	4
Start Date:	2005-10-01 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	5
Start Date:	2000-08-24 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	CR
Action Name:	CI
SEQ:	3
Start Date:	2001-02-15 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	4
Action Code:	RV
Action Name:	RMVL
SEQ:	4
Start Date:	2001-04-12 00:00:00
Finish Date:	3/6/2002
Qual:	C
Current Action Lead:	EPA Perf

Region:	9

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 4
Action Code: CO
Action Name: RI/FS
SEQ: 2
Start Date: 1994-03-02 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: RD
Action Name: RD
SEQ: 2
Start Date: 1999-08-01 00:00:00
Finish Date: 5/27/2003
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 4
Action Code: RV
Action Name: RMVL
SEQ: 3
Start Date: 2001-05-08 00:00:00
Finish Date: 9/26/2002
Qual: C
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: RS
Action Name: RV ASSESS
SEQ: 1
Start Date: 1990-08-01 00:00:00
Finish Date: 8/1/1990
Qual: Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: CR
Action Name: CI
SEQ: 6
Start Date: 2016-04-19 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 5
Action Code: RA
Action Name: RA
SEQ: 14
Start Date: 2013-09-03 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 5
Action Code: RA
Action Name: RA
SEQ: 13
Start Date: 2009-09-30 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 5
Action Code: RD
Action Name: RD
SEQ: 16

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Start Date: 2013-08-22 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: CR
Action Name: CI
SEQ: 4
Start Date: 2004-09-10 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: AR
Action Name: ADMIN REC
SEQ: 4
Start Date: 2000-03-24 00:00:00
Finish Date: Not reported
Qual: V
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: RC
Action Name: RVL CRP
SEQ: 1
Start Date: 1994-04-11 00:00:00
Finish Date: 9/24/1998
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Action Code:	AR
Action Name:	ADMIN REC
SEQ:	2
Start Date:	1994-06-28 00:00:00
Finish Date:	6/28/1994
Qual:	V
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	0
Action Code:	CR
Action Name:	CI
SEQ:	1
Start Date:	1985-01-02 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	3
Action Code:	NK
Action Name:	PRP FS
SEQ:	2
Start Date:	1985-10-28 00:00:00
Finish Date:	8/14/1997
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.
NPL:	F
FF:	N
OU:	1
Action Code:	NK
Action Name:	PRP FS
SEQ:	3
Start Date:	1998-01-08 00:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	9
Site ID:	900993
EPA ID:	CAD008242711
Site Name:	MONTROSE CHEMICAL CORP.

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

NPL: F
FF: N
OU: 0
Action Code: BB
Action Name: PRP RV
SEQ: 2
Start Date: 1988-02-19 00:00:00
Finish Date: 3/31/1999
Qual: C
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 0
Action Code: BB
Action Name: PRP RV
SEQ: 1
Start Date: 1988-02-19 00:00:00
Finish Date: 6/21/1989
Qual: C
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 1
Action Code: BD
Action Name: PRP RI/FS
SEQ: 2
Start Date: 1986-10-10 00:00:00
Finish Date: 1/8/1998
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: BF
Action Name: PRP RA
SEQ: 1
Start Date: 2012-09-19 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 1
Action Code: OM
Action Name: OM
SEQ: 7
Start Date: 2002-03-06 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 6
Action Code: NA
Action Name: PRP RI
SEQ: 1
Start Date: 2006-07-05 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 7
Action Code: BD
Action Name: PRP RI/FS
SEQ: 3
Start Date: 2008-09-24 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: BE
Action Name: PRP RD
SEQ: 2
Start Date: 2003-05-27 00:00:00
Finish Date: 9/19/2012
Qual: Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 6
Action Code: BB
Action Name: PRP RV
SEQ: 3
Start Date: 2006-01-17 00:00:00
Finish Date: 1/17/2006
Qual: S
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: OM
Action Name: OM
SEQ: 2
Start Date: 1998-09-30 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 3
Action Code: NK
Action Name: PRP FS
SEQ: 4
Start Date: 1998-01-08 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 9
Site ID: 900993
EPA ID: CAD008242711
Site Name: MONTROSE CHEMICAL CORP.
NPL: F
FF: N
OU: 6
Action Code: BD
Action Name: PRP RI/FS
SEQ: 4

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Start Date: 2016-11-04 00:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

RCRA-LQG:
Date form received by agency: 02/12/2016
Facility name: MONTROSE CHEMICAL COMPANY OF CALIFORNIA
Facility address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
EPA ID: CAD008242711
Mailing address: ERICKSEN AVENUE NE, SUITE 380
BAINBRIDGE ISLAND, WA 98110
Contact: MICHAEL A PALMER
Contact address: SCOTT STREET, SUITE 104
SAN DIEGO, CA 92106
Contact country: US
Contact telephone: 619-546-8377
Contact email: MPALMER@DEMAXIMIS.COM
EPA Region: 09
Land type: Private
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: MONTROSE CHEMICAL CORPORATION OF CALIFOR
Owner/operator address: ERICKSEN AVENUE NE, SUITE 380
BAINBRIDGE ISLAND, WA 98110
Owner/operator country: US
Owner/operator telephone: 619-546-8377
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1947
Owner/Op end date: Not reported

Owner/operator name: MONTROSE CHEMICAL COMPANY OF CALIFORNIA
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1947
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: D018
. Waste name: BENZENE

. Waste code: D021
. Waste name: CHLOROBENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: U060
. Waste name: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDD

. Waste code: U061
. Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

Historical Generators:
Date form received by agency: 03/01/2014
Site name: MONTROSE CHEMICAL COMPANY OF CALIFORNIA
Classification: Large Quantity Generator

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: D018
. Waste name: BENZENE

. Waste code: D021
. Waste name: CHLOROBENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: U060
. Waste name: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDD

. Waste code: U061
. Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

Date form received by agency: 06/15/2010
Site name: MONTROSE CHEMICAL CORPORATION OF CALIFORNIA
Classification: Large Quantity Generator

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: D018
. Waste name: BENZENE

. Waste code: D021
. Waste name: CHLOROBENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: U060
. Waste name: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDD

. Waste code: U061
. Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

Date form received by agency: 09/01/1996
Site name: MONTROSE CHEM CORP OF CA
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: MONTROSE CHEM CORP OF CA
Classification: Small Quantity Generator

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Date form received by agency: 08/07/1980
Site name: MONTROSE CHEM CORP OF CA
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:
Waste code: D021
Waste name: CHLOROBENZENE
Amount (Lbs): 1352

Waste code: U060
Waste name: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO-
Amount (Lbs): 37072

Waste code: U061
Waste name: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO-
Amount (Lbs): 37072

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/17/1982
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 12/22/1980
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

US ENG CONTROLS:
EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Actual Date: 09/30/2015
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Event Code: Not reported
Actual Date: 09/30/2015
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 001
Action Name: RECORD OF DECISION
Action Completion date: Not reported
Operable Unit: 01
Contaminated Media : Groundwater
Engineering Control: Aeration
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Air Stripping
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Carbon Adsorption
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Containment, (N.O.S.)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Discharge
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Natural Attenuation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Precipitation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 05
Contaminated Media : Fish Tissue
Engineering Control: Monitored Natural Attenuation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 05
Contaminated Media : Sediment
Engineering Control: Cap
Contact Name: Not reported
Contact Phone and Ext: Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 05
Contaminated Media : Sediment
Engineering Control: Monitored Natural Recovery
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 05
Contaminated Media : Sediment
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 05
Contaminated Media : Sediment
Engineering Control: Subaqueous Sediment Cap
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 05
Contaminated Media : Surface Water
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

US INST CONTROL:
EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Action Name: RECORD OF DECISION
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: 09/30/2015
Complet. Date: Not reported
Operable Unit: 01

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Action Name: RECORD OF DECISION
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Action Name: RECORD OF DECISION
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Drilling Restriction
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Action Name: RECORD OF DECISION
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Notices to State Regulators Before Changes in Land Ownership
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Event Code Description: Not reported

EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Action Name: RECORD OF DECISION
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Water Supply Use Restriction
Actual Date: 03/31/1999
Complet. Date: 03/30/1999
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD008242711
Site ID: 0900993
Name: MONTROSE CHEMICAL CORP.
Action Name: RECORD OF DECISION
Address: 20201 S NORMANDIE AVE
TORRANCE, CA 90502
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Fishing Restriction
Actual Date: 09/30/2009
Complet. Date: 09/30/2009
Operable Unit: 05
Contaminated Media : Sediment
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

ROD:
Full-text of USEPA Record of Decision(s) is available from EDR.

PRP name:
ATKEMIX THIRTY-SEVEN, INC.
ATKEMIX THIRTY-SEVEN, INC.
ATKEMIX THIRTY-SEVEN, INC.
ATKEMIX THIRTY-SEVEN, INC.
AVENTIS CROPSCIENCE USA, INC
AVENTIS CROPSCIENCE USA, INC
AVENTIS CROPSCIENCE USA, INC
AVENTIS CROPSCIENCE USA, INC
CBS CORPORATION
CHRIS-CRAFT CORPORATION OF CALIFORNIA
CHRIS-CRAFT CORPORATION OF CALIFORNIA
CHRIS-CRAFT CORPORATION OF CALIFORNIA
CHRIS-CRAFT CORPORATION OF CALIFORNIA
CITY OF LOS ANGELES
CITY OF LOS ANGELES
ECOLOGY CONTROL INDUSTRIES, INC.

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

ICI AMERICAN HOLDINGS, INC.
ICI AMERICAN HOLDINGS, INC.
ICI AMERICAN HOLDINGS, INC.
IMPERIAL CHEMICAL INDUSTRIES PLC
IMPERIAL CHEMICAL INDUSTRIES PLC
IMPERIAL CHEMICAL INDUSTRIES PLC
JCI JONES CHEMICALS INC
MONTROSE CHEMICAL CORP.
MONTROSE CHEMICAL CORP.
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MONTROSE CHEMICAL CORP.
MONTROSE CHEMICAL CORP.
MONTROSE CHEMICAL CORP. OF CALIFORNIA, INC.
POTLATCH CORPORATION
RHODIA INC
RHODIA INC
RONALD FLURY
SHELL OIL COMPANY
SIMPSON INVESTMENT CO
SIMPSON PAPER COMPANY
STAUFFER MANAGEMENT COMPANY
STAUFFER MANAGEMENT COMPANY
STAUFFER MANAGEMENT COMPANY
STAUFFER MANAGEMENT COMPANY
ZENECA HOLDINGS INC
ZENECA HOLDINGS INC
ZENECA HOLDINGS INC

ICIS:

Enforcement Action ID:	09-2016-2507
FRS ID:	110002630608
Action Name:	MONTROSE - ECOLOGY CONTROL INDUSTRIES UAO
Facility Name:	MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address:	20201 SOUTH NORMANDIE AVENUE TORRANCE, CA 90502
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	106
Facility SIC Code:	2879
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	33.84833
Longitude in Decimal Degrees:	-118.2983
Permit Type Desc:	Not reported
Program System Acronym:	10849

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2016-2507
FRS ID: 110002630608
Action Name: MONTROSE - ECOLOGY CONTROL INDUSTRIES UAO
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: CAD008242711
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2010-2518
FRS ID: 110002630608
Action Name: Montrose/Del Amo Superfund Sites Dual Site Groundwater OU RD/RA
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: CAD008242711
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2008-2530
FRS ID: 110002630608
Action Name: Montrose Chemical AOC with JCI Jones for RI/FS
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 122/104
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: CAD008242711
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2008-2501
FRS ID: 110002630608
Action Name: Montrose Chemical - Shell Oil
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: CAD008242711
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2008-0009
FRS ID: 110002630608
Action Name: Montrose Cemical - Kenwood
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: CAD008242711
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2006-0133
FRS ID: 110002630608
Action Name: Montrose Chemical - Normandie (#2)
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Facility SIC Code: 2879
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: 10849
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2006-0025
FRS ID: 110002630608
Action Name: Montrose Chemical - Normandie (#1)
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: 2879
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: 10849
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2003-0114
FRS ID: 110002630608
Action Name: Montrose Chemical / Del Amo (#2)
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: 2879
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: 10849
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-2003-0060
FRS ID: 110002630608
Action Name: Montrose Chemical / Del Amo (#1)
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: 2879
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: 10849
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-1998-0169
FRS ID: 110002630608
Action Name: MONTROSE - CBS/POTLATCH/SIMPSON
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
Program System Acronym: ICIS
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: 2879
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: 10849
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-1997-0048
FRS ID: 110002630608
Action Name: MONTROSE - LOS ANGELES COUNTY SANITATION DISTRICT
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE
TORRANCE, CA 90502
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
Program System Acronym: ICIS
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: 2879
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 33.84833
Longitude in Decimal Degrees: -118.2983
Permit Type Desc: Not reported
Program System Acronym: 10849
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 09-1997-0009
FRS ID: 110002630608
Action Name: MONTROSE - UAO
Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address: 20201 SOUTH NORMANDIE AVENUE

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

	TORRANCE, CA 90502
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	106
Facility SIC Code:	2879
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	33.84833
Longitude in Decimal Degrees:	-118.2983
Permit Type Desc:	Not reported
Program System Acronym:	10849
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	09-1990-0012
FRS ID:	110002630608
Action Name:	MONTROSE CHEMCIAL CORPORATION OF CALIFORNIA
Facility Name:	MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Facility Address:	20201 SOUTH NORMANDIE AVENUE
	TORRANCE, CA 90502
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Judicial
EA Type Code:	CIV
Facility SIC Code:	2879
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	33.84833
Longitude in Decimal Degrees:	-118.2983
Permit Type Desc:	Not reported
Program System Acronym:	10849
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Facility Name:	MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address:	20201 SOUTH NORMANDIE AVENUE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address:	20201 SOUTH NORMANDIE AVENUE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address:	20201 SOUTH NORMANDIE AVENUE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

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NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported

MONTROSE CHEMICAL COMPANY OF CALIFORNIA (Continued) **1000420366**

SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2879

Facility Name: MONTROSE CHEMICAL (MONTROSE SUPERFUND SITE)
Address: 20201 SOUTH NORMANDIE AVENUE
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 5191

CONSENT:
EPA ID: CAD008242711
Site ID: Not reported
Case Title: Not reported
Court Num: Not reported
District: Not reported
Entered Date: Not reported
Full-text of the consent decree for this site issued by the United States District Court is available from EDR. Contact your EDR Account Executive.

B7 **TOWNE AVENUE ELEMENTARY SCHOOL** **ENVIROSTOR** **S104575238**
North **18924 TOWNE AVENUE** **SCH** **N/A**
< 1/8 **CARSON, CA 90746**
0.046 mi.
245 ft. **Site 1 of 2 in cluster B**

Relative: **Lower**

Actual: **23 ft.**

ENVIROSTOR:

Facility ID:	19990038
Status:	No Further Action
Status Date:	07/06/2006
Site Code:	400780
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	10.5
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	64
Senate:	35
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	33.85751
Longitude:	-118.2671
APN:	7332-021-900-901, 7338021901
Past Use:	* UNKNOWN
Potential COC:	DDE Lead Acetone Diethyl phthalate Methyl ethyl ketone (2-Butanone Methylene chloride Chromium VI
Confirmed COC:	NONE SPECIFIED
Potential Description:	IA, SOIL, SV
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	TOWNE AVENUE ELEM. SCHOOL
Alias Type:	Alternate Name
Alias Name:	TOWNE AVENUE ELEMENTARY SCH. (PROPOSED)
Alias Type:	Alternate Name
Alias Name:	7332-021-900-901
Alias Type:	APN
Alias Name:	7338021901
Alias Type:	APN
Alias Name:	400780
Alias Type:	Project Code (Site Code)
Alias Name:	19990038
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	02/10/2000
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	05/30/2001

TOWNE AVENUE ELEMENTARY SCHOOL (Continued) **S104575238**

Comments: PEA Report approved with a recommendation for continuous monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/06/2006
Comments: NFA determination- based on deminishing methane concentrations observed over last five years.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/11/2000
Comments: Operation & Monitoring Work Plan Draft

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/13/2000
Comments: Operation & Monitoring Work Plan Final

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/10/2002
Comments: Soil Gas Sampling Report Event #1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/10/2002
Comments: Soil Gas Sampling Report Event #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/26/2003
Comments: Soil Gas Sampling Report Event #3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/26/2003
Comments: Soil Gas Sampling Report Event #4

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 11/17/1999
Comments: TM - Preliminary Air Sampling Invest.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/01/1999
Comments: PEA Draft Final Workplan

TOWNE AVENUE ELEMENTARY SCHOOL (Continued) **S104575238**

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Facility ID: 19990038
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 10.5
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 400780
Assembly: 64
Senate: 35
Special Program Status: Not reported
Status: No Further Action
Status Date: 07/06/2006
Restricted Use: NO
Funding: School District
Latitude: 33.85751
Longitude: -118.2671
APN: 7332-021-900-901, 7338021901
Past Use: * UNKNOWN
Potential COC: DDE, DDE, Lead, Acetone, Diethyl phthalate, Methyl ethyl ketone (2-Butanone, Methylene chloride, Chromium VI
Confirmed COC: NONE SPECIFIED
Potential Description: IA, SOIL, SV
Alias Name: LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: TOWNE AVENUE ELEM. SCHOOL
Alias Type: Alternate Name
Alias Name: TOWNE AVENUE ELEMENTARY SCH. (PROPOSED)
Alias Type: Alternate Name
Alias Name: 7332-021-900-901
Alias Type: APN
Alias Name: 7338021901
Alias Type: APN
Alias Name: 400780
Alias Type: Project Code (Site Code)
Alias Name: 19990038
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE

TOWNE AVENUE ELEMENTARY SCHOOL (Continued) **S104575238**

Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 02/10/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 05/30/2001
Comments: PEA Report approved with a recommendation for continuous monitoring.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/06/2006
Comments: NFA determination- based on deminishing methane concentrations observed over last five years.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/11/2000
Comments: Operation & Monitoring Work Plan Draft

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/13/2000
Comments: Operation & Monitoring Work Plan Final

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/10/2002
Comments: Soil Gas Sampling Report Event #1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/10/2002
Comments: Soil Gas Sampling Report Event #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/26/2003
Comments: Soil Gas Sampling Report Event #3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/26/2003
Comments: Soil Gas Sampling Report Event #4

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report

TOWNE AVENUE ELEMENTARY SCHOOL (Continued) **S104575238**

Completed Date:	11/17/1999
Comments:	TM - Preliminary Air Sampling Invest.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/01/1999
Comments:	PEA Draft Final Workplan
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

B8 **TOWNE AVENUE ELEMENTARY SCHOOL** **RCRA-LQG 1012175967**
North **18924 TOWNE AVE** **FINDS CAR000197905**
< 1/8 **CARSON, CA 90746** **ECHO**
0.046 mi.
245 ft. **Site 2 of 2 in cluster B**

Relative: **Lower**

Actual: **23 ft.**

RCRA-LQG:

Date form received by agency:	01/12/2009
Facility name:	TOWNE AVENUE ELEMENTARY SCHOOL
Facility address:	18924 TOWNE AVE CARSON, CA 90746
EPA ID:	CAR000197905
Mailing address:	333 S BEAUDRY AVE 20TH FL LAUSD OEHS LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	333 S BEAUDRY AVE 20TH FL LAUSD OEHS LOS ANGELES, CA 90017
Contact country:	US
Contact telephone:	213-241-3904
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	TOWNE AVENUE ELEMENTARY SCHOOL

TOWNE AVENUE ELEMENTARY SCHOOL (Continued) **1012175967**

Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: 11/14/1989
Owner/Op end date: Not reported

Owner/operator name: LAUSD
Owner/operator address: 333 S BEAUDRY AVE
LOS ANGELES, CA 90017
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: 11/14/1989
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

FINDS:

Registry ID: 110036942280

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

TOWNE AVENUE ELEMENTARY SCHOOL (Continued) **1012175967**

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1012175967
Registry ID: 110036942280
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110036942280

C9 **SHELL OIL CO 204-1312-0906** **RCRA-LQG** **1007199288**
NNE **605 E. UNIVERSITY** **CAD981404999**
< 1/8 **CARSONM, CA 90746**
0.120 mi.
635 ft. **Site 1 of 4 in cluster C**

Relative:
Lower

Actual:
23 ft.

RCRA-LQG:
Date form received by agency: 04/13/1990
Facility name: SHELL OIL CO 204-1312-0906
Facility address: 605 E. UNIVERSITY
CARSONM, CA 90746
EPA ID: CAD981404999
Mailing address: 511 N. BROOKHURST ST
ANAHEIM, CA 92801
Contact: RONALD L GEMEINHARDT
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 714-520-3385
Contact email: Not reported
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No

SHELL OIL CO 204-1312-0906 (Continued) **1007199288**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

C10 **VICS SHELL SERVICE** **EDR Hist Auto** **1020851794**
NNE **605 E 190TH STREET** **N/A**
< 1/8 **CARSON, CA 90746**
0.120 mi.
635 ft. **Site 2 of 4 in cluster C**

Relative: EDR Hist Auto
Lower

Actual:
23 ft.

Year:	Name:	Type:
1977	VICS SHELL SERVICE	Gasoline Service Stations
1978	VICS SHELL SERVICE	Gasoline Service Stations

C11 **SHELL OIL CO** **SWEEPS UST** **S104538544**
NNE **605 E UNIVERSITY DR** **LOS ANGELES CO. HMS** **N/A**
< 1/8 **CARSON, CA 90746**
0.120 mi.
635 ft. **Site 3 of 4 in cluster C**

Relative: SWEEPS UST:
Lower

Actual:
23 ft.

Status: Active
Comp Number: 10642
Number: 9
Board Of Equalization: Not reported
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 005501-I05702
Facility Type: 01
Facility Status: Closed
Area: 22
Permit Number: 00003010J
Permit Status: Closed

Region: LA
Permit Category: T
Facility Id: 005501-005702

SHELL OIL CO (Continued) **S104538544**

Facility Type: 0
Facility Status: Removed
Area: 22
Permit Number: 00000601T
Permit Status: Removed

C12 **RONALD NAGANO** **HIST UST** **1000375870**
NNE **605 E UNIVERSITY** **N/A**
< 1/8 **CARSON, CA 90745**
0.120 mi.
635 ft. **Site 4 of 4 in cluster C**

Relative: **Lower**
Actual: **23 ft.**

HIST UST:

File Number:	00028318
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028318.pdf
Region:	STATE
Facility ID:	00000000530
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2133292969
Owner Name:	SHELL OIL COMPANY
Owner Address:	P.O. BOX 4848
Owner City,St,Zip:	ANAHEIM, CA 92803
Total Tanks:	0005
Tank Num:	001
Container Num:	1
Year Installed:	1964
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	5
Year Installed:	1964
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	1964
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	12
Leak Detection:	Stock Inventor, 10
Tank Num:	004
Container Num:	4
Year Installed:	1964
Tank Capacity:	00005000
Tank Used for:	PRODUCT

RONALD NAGANO (Continued) **1000375870**

Type of Fuel:	PREMIUM
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor
Tank Num:	005
Container Num:	2
Year Installed:	1970
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10

Click here for Geo Tracker PDF:

D13 **WALMART NEIGHBORHOOD MARKET NO 5602** **RCRA-SQG** **1016674946**
SSE **20226 AVALON BLVD** **FINDS** **CAR000245803**
1/8-1/4 **CARSON, CA 90746** **ECHO**
0.136 mi.
718 ft. **Site 1 of 6 in cluster D**

Relative:
Lower

Actual:
8 ft.

RCRA-SQG:

Date form received by agency:	06/20/2016
Facility name:	WALMART NEIGHBORHOOD MARKET NO 5602
Facility address:	20226 AVALON BLVD CARSON, CA 90746
EPA ID:	CAR000245803
Mailing address:	PO BOX 8041 BENTONVILLE, AR 72712-8041
Contact:	ROSE ARNOLD
Contact address:	PO BOX 8041 BENTONVILLE, AR 72712-8041
Contact country:	US
Contact telephone:	479-277-8972
Contact email:	ROSE.ARNOLD@WALMART.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WAL MART STORES INC
Owner/operator address:	PO BOX 8041 BENTONVILLE, AR 72712
Owner/operator country:	US
Owner/operator telephone:	479-277-8972
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	07/16/2014
Owner/Op end date:	Not reported

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

Owner/operator name: WAL MART STORES INC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 07/16/2014
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 232
. Waste name: Pesticides and other waste associated with pesticide production

. Waste code: 311
. Waste name: Pharmaceutical waste

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: D026
. Waste name: CRESOL

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

. Waste code: D027
. Waste name: 1,4-DICHLOROBENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D043
. Waste name: VINYL CHLORIDE

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U034
. Waste name: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

. Waste code: U035
. Waste name: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

. Waste code: U058
. Waste name: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

. Waste code: U072
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U089
. Waste name: DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-

. Waste code: U122
. Waste name: FORMALDEHYDE

. Waste code: U129
. Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

. Waste code: U132
. Waste name: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U150
. Waste name: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U188
. Waste name: PHENOL

. Waste code: U200
. Waste name: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

. Waste code: U205
. Waste name: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

. Waste code: U210
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

. Waste code: U249
. Waste name: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS

. Waste code: U279
. Waste name: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE

. Waste code: U409
. Waste name: CARBAMIC ACID, [1,2-PHENYLENEBIS (IMINOCARBONOTHIOYL)]BIS-, DIMETHYL ESTER (OR) THIOPHANATE-METHYL

Historical Generators:
Date form received by agency: 05/05/2014
Site name: WALMART NEIGHBORHOOD MARKET NO 5602
Classification: Small Quantity Generator

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 232

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

. Waste name: Pesticides and other waste associated with pesticide production

. Waste code: 311
. Waste name: Pharmaceutical waste

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

. Waste name: CHLOROFORM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: D026
. Waste name: CRESOL

. Waste code: D027
. Waste name: 1,4-DICHLOROBENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D043
. Waste name: VINYL CHLORIDE

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U034
. Waste name: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

. Waste code: U035
. Waste name: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

. Waste code: U058
. Waste name: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

. Waste code: U072
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U122
. Waste name: FORMALDEHYDE

. Waste code: U129
. Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

. Waste code: U132
. Waste name: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

. Waste code: U150
. Waste name: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U188
. Waste name: PHENOL

. Waste code: U200
. Waste name: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

. Waste code: U205
. Waste name: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

. Waste code: U210
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

. Waste code: U249
. Waste name: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS

. Waste code: U279
. Waste name: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE

. Waste code: U409
. Waste name: CARBAMIC ACID, [1,2-PHENYLENEBIS (IMINOCARBONOTHIOYL)]BIS-, DIMETHYL ESTER (OR) THIOPHANATE-METHYL

Violation Status: No violations found

FINDS:

Registry ID: 110059764321

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1016674946
Registry ID: 110059764321

WALMART NEIGHBORHOOD MARKET NO 5602 (Continued) **1016674946**

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110059764321

D14 **MR. JAY'S CLEANERS** **DRYCLEANERS** **S121697230**
SSE **20232 S AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.139 mi.
732 ft. **Site 2 of 6 in cluster D**

Relative: DRYCLEAN SOUTH COAST:
Lower
Actual: Facility ID: 35499
7 ft. Application Number: 153112
Permit Number: M58314
Status: S
Representative Name: ALLEN RO
Representative Telephone: 213 3294428
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East: 382.98001099
UTM North: 3745.8789063

Facility ID: 35499
Application Number: C37745
Permit Number: M24513
Status: S
Representative Name: ALLEN RO
Representative Telephone: 213 3294428
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East: 382.98001099
UTM North: 3745.8789063

Facility ID: 35499
Application Number: 100258
Permit Number: M30665
Status: S
Representative Name: ALLEN RO
Representative Telephone: 213 3294428
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East: 382.98001099
UTM North: 3745.8789063

D15 **MR. JAY CLEANERS** **DRYCLEANERS** **S121694970**
SSE **20232 S AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.139 mi.
732 ft. **Site 3 of 6 in cluster D**

Relative: DRYCLEAN SOUTH COAST:
Lower
Actual: Facility ID: 131646
7 ft. Application Number: 398194
Permit Number: F50097
Status: S

MR. JAY CLEANERS (Continued) **S121694970**

Representative Name:	TINA BAIK
Representative Telephone:	310 3294428
Permit Status:	INACTIVE
BCAT Number:	000234
BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East:	382.98001099
UTM North:	3745.8789063

D16 **MR JAY CLEANERS, CHIN SOO PARK DBA** **DRYCLEANERS** **S121695727**
SSE **20232 S AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.139 mi.
732 ft. **Site 4 of 6 in cluster D**

Relative: DRYCLEAN SOUTH COAST:
Lower

Facility ID:	145084
Application Number:	445814
Permit Number:	F77175
Status:	A
Representative Name:	CHIN SOO PARK
Representative Telephone:	310 3294428
Permit Status:	INACTIVE
BCAT Number:	000234
BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East:	382.98001099
UTM North:	3745.8789063

Actual:
7 ft.

Facility ID:	145084
Application Number:	446630
Permit Number:	F77217
Status:	A
Representative Name:	CHIN SOO PARK
Representative Telephone:	310 3294428
Permit Status:	INACTIVE
BCAT Number:	000603
BCAT Description:	DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
UTM East:	382.98001099
UTM North:	3745.8789063

Facility ID:	145084
Application Number:	468200
Permit Number:	F90540
Status:	A
Representative Name:	CHIN SOO PARK
Representative Telephone:	310 3294428
Permit Status:	INACTIVE
BCAT Number:	000603
BCAT Description:	DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
UTM East:	382.98001099
UTM North:	3745.8789063

D17
SSE
1/8-1/4
0.139 mi.
732 ft.
Relative: Lower
Actual: 7 ft.

MR. JAY'S CLEANER
20232 AVALON
CARSON, CA 90745

Site 5 of 6 in cluster D

CPS-SLIC **S106387054**
N/A

CPS-SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	06/01/1997
Global Id:	SL184631446
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	33.847397
Longitude:	-118.263745
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	0602
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 4:

Region:	4
Facility Status:	No further action required
SLIC:	0602
Substance:	VOCs
Staff:	Ana Velos

D18
SSE
1/8-1/4
0.139 mi.
732 ft.
Relative: Lower
Actual: 7 ft.

MR JAY CLEANERS
20232 S AVALON BLVD
CARSON, CA 90746

Site 6 of 6 in cluster D

RCRA NonGen / NLR **1000265407**
FINDS **CAD982471245**
ECHO
DRYCLEANERS
EMI
HAZNET
LA Co. Site Mitigation

RCRA NonGen / NLR:

Date form received by agency:	08/07/2001
Facility name:	MR JAY CLEANERS
Facility address:	20232 S AVALON BLVD CARSON, CA 90746
EPA ID:	CAD982471245
Contact:	ALLEN RO
Contact address:	2623 WOODBURY DR TORRANCE, CA 90503
Contact country:	US
Contact telephone:	310-782-3874
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ALLEN YUN S RO

MR JAY CLEANERS (Continued) **1000265407**

Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002819905

Environmental Interest/Information System
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STATE MASTER

MR JAY CLEANERS (Continued) **1000265407**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000265407
Registry ID:	110002819905
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002819905

DRYCLEANERS:

EPA Id:	CAL000224304
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	06/14/2001
Facility Active:	No
Inactive Date:	06/30/2003
Facility Addr2:	Not reported
Owner Name:	TINA BAIK
Owner Address:	20232 S AVALON BLVD
Owner Address 2:	Not reported
Owner Telephone:	0000000000
Contact Name:	TINA BAIK/ OWNER
Contact Address:	20232 S AVALON BLVD
Contact Address 2:	Not reported
Contact Telephone:	3103294428
Mailing Name:	Not reported
Mailing Address 1:	20232 S AVALON BLVD
Mailing Address 2:	Not reported
Mailing City:	CARSON
Mailing State:	CA
Mailing Zip:	907460000
Owner Fax:	Not reported
Region Code:	3

EPA Id:	CAD982471245
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	06/15/1989
Facility Active:	No
Inactive Date:	06/30/2001
Facility Addr2:	Not reported
Owner Name:	ALLEN RO
Owner Address:	20232 S AVALON BLVD
Owner Address 2:	Not reported
Owner Telephone:	0000000000
Contact Name:	ALLEN RO
Contact Address:	INACTIVE PER VQ01 - BMI
Contact Address 2:	Not reported
Contact Telephone:	--
Mailing Name:	Not reported
Mailing Address 1:	20232 AVALON BLVD # S
Mailing Address 2:	Not reported

MR JAY CLEANERS (Continued) **1000265407**

Mailing City:	CARSON
Mailing State:	CA
Mailing Zip:	907460000
Owner Fax:	Not reported
Region Code:	3

EMI:

Year:	1987
County Code:	19
Air Basin:	SC
Facility ID:	35499
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	35499
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HAZNET:

envid:	1000265407
Year:	1996
GEPAID:	CAD982471245
Contact:	ALLEN RO
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	20232 AVALON BLVD # S
Mailing City,St,Zip:	CARSON, CA 907460000
Gen County:	Not reported
TSD EPA ID:	CAT000646117
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Disposal, Land Fill
Tons:	75.8520

MR JAY CLEANERS (Continued) **1000265407**

Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000265407
Year:	1996
GEPAID:	CAD982471245
Contact:	ALLEN RO
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	20232 AVALON BLVD # S
Mailing City,St,Zip:	CARSON, CA 907460000
Gen County:	Not reported
TSD EPA ID:	CAD000646117
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Disposal, Land Fill
Tons:	15.1704
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000265407
Year:	1996
GEPAID:	CAD982471245
Contact:	ALLEN RO
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	20232 AVALON BLVD # S
Mailing City,St,Zip:	CARSON, CA 907460000
Gen County:	Not reported
TSD EPA ID:	CAD000646117
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Disposal, Land Fill
Tons:	15.1704
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	1000265407
Year:	1996
GEPAID:	CAD982471245
Contact:	ALLEN RO
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	20232 AVALON BLVD # S
Mailing City,St,Zip:	CARSON, CA 907460000
Gen County:	Not reported
TSD EPA ID:	NVT330010000
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Disposal, Land Fill
Tons:	121.3632
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

MR JAY CLEANERS (Continued) **1000265407**

LA Co. Site Mitigation:
- Facility ID: FA0003996
- Status: Not reported
- Site ID: SD0010543
- Jurisdiction: Not reported
- Case ID: RO0010543
- Abated: Yes
- Assigned To: GB
- Entered Date: Not reported
- Abated Date: 08/13/1996

E19 **RALPHS GROCERY #255** **SWRCY S113797635**
NE **619 E UNIVERSITY DR** **HAZNET N/A**
1/8-1/4 **CARSON, CA 90746**
0.150 mi.
792 ft. **Site 1 of 9 in cluster E**

Relative: **Lower**

Actual: **24 ft.**

SWRCY:
- Reg Id: 248215
- Cert Id: RC248215.001
- Mailing Address: 11217 Burin Ave
- Mailing City: Inglewood
- Mailing State: CA
- Mailing Zip Code: 90304
- Website: Not reported
- Email: jchavezd1975@gmail.com
- Phone Number: (310) 671-1763
- Grand Father: N
- Rural: N
- Operation Begin Date: 08/01/2016
- Aluminium: Y
- Glass: Y
- Plastic: Y
- Bimetal: Y
- Agency: N/A
- Monday Hours Of Operation: 9:00 am - 5:00 pm; Closed 12-12:30 pm
- Tuesday Hours Of Operation: 9:00 am - 5:00 pm; Closed 12-12:30 pm
- Wednesday Hours Of Operation: 9:00 am - 5:00 pm; Closed 12-12:30 pm
- Thursday Hours Of Operation: 9:00 am - 5:00 pm; Closed 12-12:30 pm
- Friday Hours Of Operation: 9:00 am - 5:00 pm; Closed 12-12:30 pm
- Saturday Hours Of Operation: 9:00 am - 5:00 pm; Closed 12-12:30 pm
- Sunday Hours Of Operation: CLOSED
- Organization ID: 231222
- Organization Name: Chavez Recycling

HAZNET:
- envid: S113797635
- Year: 2016
- GEPAID: CAL000394684
- Contact: EDGAR FLORES
- Telephone: 3239193290
- Mailing Name: Not reported
- Mailing Address: 4000 UNION PACIFIC AVENUE
- Mailing City,St,Zip: COMMERCE, CA 90023
- Gen County: Los Angeles
- TSD EPA ID: CAD008364432
- TSD County: Los Angeles

RALPHS GROCERY #255 (Continued) **S113797635**

Waste Category:	Alkaline solution without metals pH >= 12.5
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.087
Cat Decode:	Alkaline solution without metals pH >= 12.5
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	S113797635
Year:	2016
GEPAID:	CAL000394684
Contact:	EDGAR FLORES
Telephone:	3239193290
Mailing Name:	Not reported
Mailing Address:	4000 UNION PACIFIC AVENUE
Mailing City,St,Zip:	COMMERCE, CA 90023
Gen County:	Los Angeles
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Waste Category:	Unspecified solvent mixture
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.069
Cat Decode:	Unspecified solvent mixture
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	S113797635
Year:	2016
GEPAID:	CAL000394684
Contact:	EDGAR FLORES
Telephone:	3239193290
Mailing Name:	Not reported
Mailing Address:	4000 UNION PACIFIC AVENUE
Mailing City,St,Zip:	COMMERCE, CA 90023
Gen County:	Los Angeles
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Waste Category:	Other inorganic solid waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.004
Cat Decode:	Other inorganic solid waste
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	S113797635
Year:	2016
GEPAID:	CAL000394684
Contact:	EDGAR FLORES
Telephone:	3239193290
Mailing Name:	Not reported
Mailing Address:	4000 UNION PACIFIC AVENUE
Mailing City,St,Zip:	COMMERCE, CA 90023

RALPHS GROCERY #255 (Continued) **S113797635**

Gen County:	Los Angeles
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.018
Cat Decode:	Off-specification, aged or surplus organics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles
envid:	S113797635
Year:	2016
GEPAID:	CAL000394684
Contact:	EDGAR FLORES
Telephone:	3239193290
Mailing Name:	Not reported
Mailing Address:	4000 UNION PACIFIC AVENUE
Mailing City,St,Zip:	COMMERCE, CA 90023
Gen County:	Los Angeles
TSD EPA ID:	CAD008364432
TSD County:	Los Angeles
Waste Category:	Liquids with pH <= 2
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0155
Cat Decode:	Liquids with pH <= 2
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
5 additional CA_HAZNET: record(s) in the EDR Site Report.

E20 **CARSON PLAZA** **CPS-SLIC** **S105119579**
NE **603 UNIVERSITY** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.182 mi.
963 ft. **Site 2 of 9 in cluster E**

Relative: SLIC REG 4:
Lower

Region:	4
Facility Status:	Site Assessment
SLIC:	1049
Substance:	VOCs
Staff:	RE

Actual:
24 ft.

E21
NE
1/8-1/4
0.182 mi.
963 ft.

CARSON PLAZA
603 E. UNIVERSITY DR
CARSON, CA 90746

Site 3 of 9 in cluster E

CPS-SLIC **S109936400**
N/A

Relative:
Lower

Actual:
24 ft.

CPS-SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	12/19/2006
Global Id:	SLT43683681
Lead Agency:	DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Lead Agency Case Number:	60000604
Latitude:	33.858128
Longitude:	-118.265846
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	DTSC
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Case (with all files) transferred to DTSC on December 19, 2006

Click here to access the California GeoTracker records for this facility:

E22
NE
1/8-1/4
0.182 mi.
963 ft.

NATS CLEANERS CARSON PLAZA
641 EAST UNIVERSITY DRIVE
CARSON, CA 90746

Site 4 of 9 in cluster E

ENVIROSTOR **1007737650**
VCP **N/A**
FINDS
CIWQS

Relative:
Lower

Actual:
24 ft.

ENVIROSTOR:

Facility ID:	60000604
Status:	Active
Status Date:	04/02/2007
Site Code:	401333
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	1.9
NPL:	NO
Regulatory Agencies:	SMBRP, RWQCB 4 - Los Angeles
Lead Agency:	RWQCB 4 - Los Angeles
Program Manager:	S. Steven Hariri
Supervisor:	Ju-Tseng Liu
Division Branch:	Engineering & Special Projects
Assembly:	64
Senate:	35
Special Program:	Prospective Purchaser Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.8579
Longitude:	-118.2649
APN:	NONE SPECIFIED
Past Use:	DRY CLEANING
Potential COC:	Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,1-Dichloroethane
Confirmed COC:	NONE SPECIFIED
Potential Description:	OTH, SOIL, SV

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Alias Name: 110018970363
Alias Type: EPA (FRS #)
Alias Name: SLT43683681
Alias Type: GeoTracker Global ID
Alias Name: 401333
Alias Type: Project Code (Site Code)
Alias Name: 60000604
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 12/19/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/18/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/15/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 11/14/2011
Comments: DTSC Approved the Tech Memo.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/14/2011
Comments: DTSC Reviewed and Approved the QM.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/23/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/29/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/07/2013
Comments: Accepted, comments to be addressed on future reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/15/2014
Comments: Accepted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/11/2014
Comments: DTSC approved report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2014
Comments: DTS Accepted QM Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: DTSC Accepeted Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Completed Date:	06/22/2015
Comments:	DTSC Accepted QM Report
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/29/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/02/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Plan
Completed Date:	07/16/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/03/2009
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	60000604
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	1.9
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, RWQCB 4 - Los Angeles
Lead Agency:	RWQCB 4 - Los Angeles
Lead Agency Description:	RWQCB 4 - Los Angeles
Project Manager:	S. Steven Hariri
Supervisor:	Ju-Tseng Liu
Division Branch:	Engineering & Special Projects
Site Code:	401333
Assembly:	64
Senate:	35
Special Programs Code:	Prospective Purchaser Program
Status:	Active
Status Date:	04/02/2007
Restricted Use:	NO

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Funding:	Responsible Party
Lat/Long:	33.8579 / -118.2649
APN:	NONE SPECIFIED
Past Use:	DRY CLEANING
Potential COC:	30022, 30027, 30028, 30192
Confirmed COC:	NONE SPECIFIED
Potential Description:	OTH, SOIL, SV
Alias Name:	110018970363
Alias Type:	EPA (FRS #)
Alias Name:	SLT43683681
Alias Type:	GeoTracker Global ID
Alias Name:	401333
Alias Type:	Project Code (Site Code)
Alias Name:	60000604
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	12/19/2007
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/18/2008
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	07/15/2011
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	11/14/2011
Comments:	DTSC Approved the Tech Memo.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	11/14/2011
Comments:	DTSC Reviewed and Approved the QM.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	04/17/2013
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	04/23/2012
Comments:	Not reported

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/29/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/07/2013
Comments: Accepted, comments to be addressed on future reports.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/15/2014
Comments: Accepted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/11/2014
Comments: DTSC approved report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2014
Comments: DTS Accepted QM Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Completed Date: 02/03/2015
Comments: DTSC Accepeted Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/22/2015
Comments: DTSC Accepted QM Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/29/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/02/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 07/16/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/03/2009
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

FINDS:

Registry ID: 110018970363

Environmental Interest/Information System

California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

CIWQS:

Agency:	Bhullar Properties, LLC
Agency Address:	7287 Royal Oaks Court, Pleasanton, CA 94566
Place/Project Type:	Service/Commercial Site, NEC
SIC/NAICS:	5331
Region:	4
Program:	WDRNONMUNIPRCS
Regulatory Measure Status:	Active
Regulatory Measure Type:	Enrollee - WDR
Order Number:	R4-2014-0187
WDID:	4B198601026
NPDES Number:	Not reported
Adoption Date:	Not reported
Effective Date:	05/29/2015
Termination Date:	Not reported
Expiration/Review Date:	05/29/2025
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	A
TTWQ:	3
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.85824
Longitude:	-118.26417

Agency:	Terra Vac Corporation
Agency Address:	961 Garcia Avenue D, Pittsburg, CA 94565
Place/Project Type:	Service/Commercial Site, NEC
SIC/NAICS:	5331
Region:	4
Program:	NPDNONMUNIPRCS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	Enrollee
Order Number:	R4-2002-0107
WDID:	4B196800055
NPDES Number:	CAG914001
Adoption Date:	Not reported
Effective Date:	02/11/2003
Termination Date:	08/15/2007
Expiration/Review Date:	05/23/2007
Design Flow:	0.0648
Major/Minor:	Minor
Complexity:	B
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0

NATS CLEANERS CARSON PLAZA (Continued) **1007737650**

Latitude: 33.85824
Longitude: -118.26417

F23 **CARSON MOBIL** **UST** **U004265158**
SSE **20223 S AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.188 mi.
992 ft. **Site 1 of 6 in cluster F**

Relative: UST:
Lower
Facility ID: LACoFA0004005
Actual: Permitting Agency: Los Angeles County Fire Department
15 ft. Latitude: 33.84782
Longitude: -118.2658

E24 **NAT'S CLEANERS** **DRYCLEANERS** **S121697353**
NE **641 E UNIVERSITY DR** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.190 mi.
1003 ft. **Site 5 of 9 in cluster E**

Relative: DRYCLEAN SOUTH COAST:
Lower
Facility ID: 36711
Actual: Application Number: 114684
25 ft. Permit Number: M33999
Status: O
Representative Name: SUH PARK
Representative Telephone: 213 5327328
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East: 0
UTM North: 0

Facility ID: 36711
Application Number: 245177
Permit Number: D43359
Status: O
Representative Name: SUH PARK
Representative Telephone: 213 5327328
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East: 0
UTM North: 0

Facility ID: 36711
Application Number: 101730
Permit Number: M28804
Status: O
Representative Name: SUH PARK
Representative Telephone: 213 5327328
Permit Status: INACTIVE
BCAT Number: 000234
BCAT Description: DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East: 0

NAT'S CLEANERS (Continued) **S121697353**

UTM North: 0

E25 **NAT'S CLEANERS** **DRYCLEANERS** **S113082349**
NE **641 E UNIVERSITY DR** **HAZNET** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.190 mi.
1003 ft. **Site 6 of 9 in cluster E**

Relative: **Lower**
Actual: **25 ft.**

DRYCLEAN SOUTH COAST:

Facility ID:	170600
Application Number:	532641
Permit Number:	G18354
Status:	A
Representative Name:	IL SU KIM
Representative Telephone:	310 5322328
Permit Status:	ACTIVE
BCAT Number:	000603
BCAT Description:	DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
UTM East:	382.97000122
UTM North:	3746.9599609

HAZNET:

envid:	S113082349
Year:	1995
GEPAID:	CAL000152088
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	641 E UNIVERSITY DR
Mailing City,St,Zip:	CARSON, CA 907461966
Gen County:	Not reported
TSD EPA ID:	CAD981397417
TSD County:	Not reported
Waste Category:	Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method:	Recycler
Tons:	.4108
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

E26 **NAT'S CLEANERS, OKBAE SUNG, DBA** **DRYCLEANERS** **S121693921**
NE **641 E UNIVERSITY DR** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.190 mi.
1003 ft. **Site 7 of 9 in cluster E**

Relative: **Lower**
Actual: **25 ft.**

DRYCLEAN SOUTH COAST:

Facility ID:	112032
Application Number:	327048
Permit Number:	F6579
Status:	S
Representative Name:	STEPHEN SUNG
Representative Telephone:	310 5322328
Permit Status:	INACTIVE
BCAT Number:	000234

NAT'S CLEANERS, OKBAE SUNG, DBA (Continued) **S121693921**

BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East:	382.96099854
UTM North:	3746.9619141
Facility ID:	112032
Application Number:	424955
Permit Number:	F66157
Status:	S
Representative Name:	STEPHEN SUNG
Representative Telephone:	310 5322328
Permit Status:	INACTIVE
BCAT Number:	000603
BCAT Description:	DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
UTM East:	382.96099854
UTM North:	3746.9619141
Facility ID:	112032
Application Number:	468140
Permit Number:	F90380
Status:	S
Representative Name:	STEPHEN SUNG
Representative Telephone:	310 5322328
Permit Status:	INACTIVE
BCAT Number:	000603
BCAT Description:	DRY CLEANING,DRY-TO-DRY NV,W/ SIC,PERC
UTM East:	382.96099854
UTM North:	3746.9619141

E27 **CARSON PLAZA-NATS CLEANERS** **DRYCLEANERS** **S102824395**
NE **641 E UNIVERSITY DR** **WDS** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.190 mi.
1003 ft. **Site 8 of 9 in cluster E**

Relative: DRYCLEANERS:
Lower

Actual:
25 ft.

EPA Id:	CAL000372016
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	02/27/2012
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Owner Name:	IL SU KIM
Owner Address:	641 E UNIVERSITY DR
Owner Address 2:	Not reported
Owner Telephone:	3102189780
Contact Name:	IL SU KIM
Contact Address:	641 E UNIVERSITY DR
Contact Address 2:	Not reported
Contact Telephone:	3102189780
Mailing Name:	Not reported
Mailing Address 1:	641 E UNIVERSITY DR
Mailing Address 2:	Not reported
Mailing City:	CARSON
Mailing State:	CA
Mailing Zip:	907460000

CARSON PLAZA-NATS CLEANERS (Continued) **S102824395**

Owner Fax: 3103265042
Region Code: 3

WDS:
Facility ID: Los Angeles River 196800055
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAG914001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 4
Facility Telephone: 7146661988
Facility Contact: Skye Gree
Agency Name: TERRA VAC CORPORATION
Agency Address: 1211 North Barsten Way
Agency City,St,Zip: Anaheim 92806
Agency Contact: James Keegan
Agency Telephone: 7146661988
Agency Type: Private
SIC Code: 5331
SIC Code 2: Not reported
Primary Waste Type: Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Primary Waste: CNWTRS
Waste Type2: Not reported
Waste2: Contaminated Ground Water
Primary Waste Type: Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: No reclamation requirements associated with this facility.
POTW: The facility is not a POTW.
Treat To Water: Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Complexity: Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.

E28
NE
1/8-1/4
0.190 mi.
1003 ft.

NAT'S CLEANERS
641 E UNIVERSITY DR
CARSON, CA 90746

Site 9 of 9 in cluster E

DRYCLEANERS **S121693287**
N/A

Relative:
Lower

Actual:
25 ft.

DRYCLEAN SOUTH COAST:

Facility ID:	100631
Application Number:	290088
Permit Number:	D80921
Status:	S
Representative Name:	JOHN SUNG KIM
Representative Telephone:	310 5322328
Permit Status:	INACTIVE
BCAT Number:	000234
BCAT Description:	DRY CLEANING EQUIP PERCHLOROETHYLENE
UTM East:	0
UTM North:	0

G29
SSE
1/8-1/4
0.194 mi.
1022 ft.

EXXONMOBIL OIL CORP.
20240 AVALON BLVD
CARSON, CA 90746

Site 1 of 12 in cluster G

RCRA-LQG **1007200211**
CAL000056250

Relative:
Lower

Actual:
18 ft.

RCRA-LQG:

Date form received by agency:	02/28/2002
Facility name:	EXXONMOBIL OIL CORP.
Facility address:	20240 AVALON BLVD CARSON, CA 90746
EPA ID:	CAL000056250
Mailing address:	WEST BAYAUD AVE. LAKEWOOD, CO 80228
Contact:	JOHN HOOVER
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	800-253-8054
Contact email:	Not reported
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	EXXONMOBIL OIL CORP.
Owner/operator address:	Not reported Not reported
Owner/operator country:	US

EXXONMOBIL OIL CORP. (Continued) **1007200211**

Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/31/2002
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

G30 **ART PAUL SVC** **RCRA-SQG** **1000127464**
SSE **20240 AVALON** **LUST** **CAD981677313**
1/8-1/4 **CARSON, CA 90745** **FINDS**
0.194 mi. **ECHO**
1022 ft. **Site 2 of 12 in cluster G** **HAZNET**
HIST CORTESE
Relative: **LOS ANGELES CO. HMS**
Lower

Actual: **18 ft.**

RCRA-SQG:
Date form received by agency: 10/06/1986
Facility name: ART PAUL SVC
Facility address: 20240 AVALON
CARSON, CA 90745
EPA ID: CAD981677313
Mailing address: AVALON
CARSON, CA 90745
Contact: ENVIRONMENTAL MANAGER
Contact address: 20240 AVALON
CARSON, CA 90745
Contact country: US
Contact telephone: 213-532-2566

ART PAUL SVC (Continued) **1000127464**

Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: ARTHUR H PAUL
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

LUST:
Lead Agency: LOS ANGELES RWQCB (REGION 4)

ART PAUL SVC (Continued) **1000127464**

Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603703197
Global Id:	T0603703197
Latitude:	33.8478170271764
Longitude:	-118.264313936234
Status:	Completed - Case Closed
Status Date:	08/12/2010
Case Worker:	MB
RB Case Number:	I-06340
Local Agency:	LOS ANGELES COUNTY
File Location:	Regional Board
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

LUST:

Global Id:	T0603703197
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603703197
Contact Type:	Regional Board Caseworker
Contact Name:	MAGDY BAIADY
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	mbaiady@waterboards.ca.gov
Phone Number:	2135766699

LUST:

Global Id:	T0603703197
Action Type:	RESPONSE
Date:	04/15/2010
Action:	Monitoring Report - Semi-Annually

Global Id:	T0603703197
Action Type:	RESPONSE
Date:	04/15/2005
Action:	Monitoring Report - Quarterly

Global Id:	T0603703197
Action Type:	RESPONSE
Date:	10/15/2004
Action:	Monitoring Report - Quarterly

Global Id:	T0603703197
Action Type:	RESPONSE
Date:	04/15/2009
Action:	Monitoring Report - Quarterly

Global Id: T0603703197

ART PAUL SVC (Continued) **1000127464**

Action Type: RESPONSE
Date: 07/23/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0603703197
Action Type: RESPONSE
Date: 01/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 02/03/2003
Action: Tank Removal Report / UST Sampling Report

Global Id: T0603703197
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 08/12/2005
Action: Soil and Water Investigation Report

Global Id: T0603703197
Action Type: RESPONSE
Date: 09/02/2009
Action: Soil and Water Investigation Workplan

Global Id: T0603703197
Action Type: Other
Date: 09/29/1986
Action: Leak Stopped

Global Id: T0603703197
Action Type: ENFORCEMENT
Date: 06/12/2009
Action: Site Visit / Inspection / Sampling

Global Id: T0603703197
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603703197
Action Type: RESPONSE
Date: 10/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 04/15/2004

ART PAUL SVC (Continued) **1000127464**

Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: Other
Date: 10/02/1986
Action: Leak Reported

Global Id: T0603703197
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 10/28/2008
Action: Request for Closure

Global Id: T0603703197
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 04/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: ENFORCEMENT
Date: 07/12/2010
Action: Notification - Preclosure

Global Id: T0603703197
Action Type: RESPONSE
Date: 04/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603703197
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: Other
Date: 09/29/1986
Action: Leak Discovery

Global Id: T0603703197
Action Type: ENFORCEMENT
Date: 01/17/2003
Action: * No Action

ART PAUL SVC (Continued) **1000127464**

Global Id: T0603703197
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: RESPONSE
Date: 04/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603703197
Action Type: ENFORCEMENT
Date: 12/11/2008
Action: Site Visit / Inspection / Sampling

Global Id: T0603703197
Action Type: RESPONSE
Date: 01/15/2008
Action: Remedial Progress Report

Global Id: T0603703197
Action Type: RESPONSE
Date: 04/15/2008
Action: Remedial Progress Report

Global Id: T0603703197
Action Type: ENFORCEMENT
Date: 08/12/2010
Action: Closure/No Further Action Letter

Global Id: T0603703197
Action Type: RESPONSE
Date: 02/01/2010
Action: Request for Closure

LUST:
Global Id: T0603703197
Status: Open - Case Begin Date
Status Date: 09/29/1986

Global Id: T0603703197
Status: Open - Site Assessment
Status Date: 11/25/1986

Global Id: T0603703197
Status: Open - Site Assessment
Status Date: 05/12/1988

Global Id: T0603703197
Status: Open - Remediation
Status Date: 06/30/2008

Global Id: T0603703197
Status: Completed - Case Closed
Status Date: 08/12/2010

ART PAUL SVC (Continued) **1000127464**

FINDS:

Registry ID: 110002747662

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000127464
Registry ID:	110002747662
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002747662

HAZNET:

envid:	1000127464
Year:	2002
GEPAID:	CAD981677313
Contact:	--
Telephone:	3105322566
Mailing Name:	Not reported
Mailing Address:	PO BOX 4851
Mailing City,St,Zip:	CARSON, CA 907490000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	1.25
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

envid:	1000127464
Year:	1999
GEPAID:	CAD981677313
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	20240 AVALON BLVD
Mailing City,St,Zip:	CARSON, CA 907460000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Oil/water separation sludge
Disposal Method:	Recycler
Tons:	1.6680
Cat Decode:	Not reported
Method Decode:	Not reported

ART PAUL SVC (Continued) **1000127464**

Facility County: Los Angeles

envid: 1000127464
Year: 1993
GEPAID: CAD981677313
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 20240 AVALON BLVD
Mailing City,St,Zip: CARSON, CA 907460000
Gen County: Not reported
TSD EPA ID: CAT000613893
TSD County: Not reported
Waste Category: Organic liquids (nonsolvents) with halogens
Disposal Method: Transfer Station
Tons: 0.41849999999
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

envid: 1000127464
Year: 1993
GEPAID: CAD981677313
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 20240 AVALON BLVD
Mailing City,St,Zip: CARSON, CA 907460000
Gen County: Not reported
TSD EPA ID: CAT000613976
TSD County: Not reported
Waste Category: Organic liquids (nonsolvents) with halogens
Disposal Method: Transfer Station
Tons: 0.27900000000
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 370

Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-06340

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 006124-I16994
Facility Type: 01
Facility Status: Removed
Area: 22

ART PAUL SVC (Continued) **1000127464**

Permit Number: 000012786
Permit Status: Removed

G31 **MOBIL OIL CORP S/S #18-MCE** **UST** **U003940703**
SSE **20240 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.194 mi.
1022 ft. **Site 3 of 12 in cluster G**

Relative: UST:
Lower
Facility ID: 6340
Actual: Permitting Agency: LOS ANGELES COUNTY
18 ft. Latitude: 33.8491463
Longitude: -118.2629786

G32 **MOBIL OIL CORP** **SWEEPS UST** **S101582654**
SSE **20240 S AVALON BLVD** **CA FID UST** **N/A**
1/8-1/4 **CARSON, CA 90746** **LOS ANGELES CO. HMS**
0.194 mi.
1022 ft. **Site 4 of 12 in cluster G**

Relative: SWEEPS UST:
Lower
Status: Active
Actual: Comp Number: 6340
18 ft. Number: 1
Board Of Equalization: 44-000400
Referral Date: 03-19-90
Action Date: 03-19-90
Created Date: 06-30-89
Owner Tank Id: PIPING-REMOVAL
SWRCB Tank Id: 19-000-006340-000001
Tank Status: A
Capacity: 1
Active Date: 03-19-90
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 4

Status: Active
Comp Number: 6340
Number: 1
Board Of Equalization: 44-000400
Referral Date: 03-19-90
Action Date: 03-19-90
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-006340-000002
Tank Status: A
Capacity: 1
Active Date: 03-19-90
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

MOBIL OIL CORP (Continued) **S101582654**

Status: Active
Comp Number: 6340
Number: 1
Board Of Equalization: 44-000400
Referral Date: 03-19-90
Action Date: 03-19-90
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-006340-000003
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 6340
Number: 1
Board Of Equalization: 44-000400
Referral Date: 03-19-90
Action Date: 03-19-90
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-006340-000004
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19000951
Regulated By: UTNKA
Regulated ID: 00040028
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 0000000000
Mail To: Not reported
Mailing Address: 3800 W ALAMEDA AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: CARSON 90746
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I

MOBIL OIL CORP (Continued) **S101582654**

Facility Id: 006124-I06340
Facility Type: 01
Facility Status: Closed
Area: 22
Permit Number: 000002587
Permit Status: Closed

G33 **MOBIL 18-MA8** **LUST** **S105693596**
SSE **20240 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.194 mi.
1022 ft. **Site 5 of 12 in cluster G**

Relative: **Lower**

Actual: **18 ft.**

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	I-06340	
Status:	Pollution Characterization	
Substance:	Waste Oil	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Excavate and Dispose
Global ID:	T0603703197	
W Global ID:	Not reported	
Staff:	MB	
Local Agency:	19000	
Cross Street:	DEL AMO	
Enforcement Type:	None Taken	
Date Leak Discovered:	9/29/1986	
Date Leak First Reported:		10/2/1986
Date Leak Record Entered:	12/31/1986	
Date Confirmation Began:	11/25/1986	
Date Leak Stopped:	9/29/1986	
Date Case Last Changed on Database:		10/15/2002
Date the Case was Closed:		Not reported
How Leak Discovered:	Tank Test	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Tank	
Operator:	PAUL, ARTHUR	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5364.733748900236280115203527 9
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		5/12/1988
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		2/27/2003
Hist Max MTBE Conc in Groundwater:		21800
Hist Max MTBE Conc in Soil:		20000
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	=	

MOBIL 18-MA8 (Continued) **S105693596**

Soil Qualifier:	=
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	VIRGINIA MOORE
RP Address:	43218 BUSINESS PARK DR., #E4
Program:	LUST
Lat/Long:	33.8479498 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	HIGH MTBE DUE TO WELL HEAD PROBLEM AS DISCRIBED DURING TELEPHONE CAL W/MIKE BITTED; 10/10/00 3RD QTR GW MON RPT; 1/5/01 4TH QTR GW MON RPT 2000; 4/5/01 1ST QTR GW MON RPT 2001

G34 **ARTHUR H PAUL** **HIST UST** **U001565784**
SSE **20240 AVALON** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.194 mi.
1022 ft. **Site 6 of 12 in cluster G**

Relative: **Lower**
Actual: **18 ft.**

HIST UST:

File Number:	00027E9A
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00027E9A.pdf
Region:	STATE
Facility ID:	00000040028
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	SAME
Telephone:	2135322566
Owner Name:	MOBIL OIL CORP.
Owner Address:	612 S. FLOWER ST.
Owner City,St,Zip:	LOS ANGELES, CA 90017
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000280
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	4
Year Installed:	1983
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	1983

ARTHUR H PAUL (Continued) **U001565784**

Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	2
Year Installed:	1983
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

F35 **CARSON MOBIL** **RCRA-SQG 1000288378**
SSE **20223 S AVALON BLVD** **HIST UST CAD981404932**
1/8-1/4 **CARSON, CA 90746** **FINDS**
0.197 mi. **ECHO**
1042 ft. **Site 2 of 6 in cluster F**

Relative: **Lower**
Actual: **18 ft.**

RCRA-SQG:

Date form received by agency:	04/08/1998
Facility name:	SHELL OIL CO
Facility address:	20223 S. AVALON CARSON, CA 90745
EPA ID:	CAD981404932
Mailing address:	P O BOX 4453 HOUSTON, TX 77210-4453
Contact:	SONDRA BIENVENU
Contact address:	P O BOX 4453 HOUSTON, TX 77210-4453
Contact country:	US
Contact telephone:	713-241-2258
Contact email:	Not reported
EPA Region:	09
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator

CARSON MOBIL (Continued) **1000288378**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: EQUILON ENTERPRISES LLC
Owner/operator address: P O BOX 4453
HOUSTON, TX 77210
Owner/operator country: Not reported
Owner/operator telephone: 713-241-2258
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Historical Generators:
Date form received by agency: 09/01/1996
Site name: SHELL OIL CO
Classification: Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/26/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

HIST UST:
File Number: Not reported
URL: Not reported

CARSON MOBIL (Continued) **1000288378**

Region:	STATE
Facility ID:	00000006452
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2135329850
Owner Name:	SHELL OIL COMPANY
Owner Address:	P. O. BOX 4848
Owner City,St,Zip:	ANAHEIM, CA 92803
Total Tanks:	0005
Tank Num:	001
Container Num:	1
Year Installed:	1968
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	2
Year Installed:	1968
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10
Tank Num:	003
Container Num:	3
Year Installed:	1968
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10
Tank Num:	004
Container Num:	4
Year Installed:	1970
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10
Tank Num:	005
Container Num:	5
Year Installed:	1968
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	12
Leak Detection:	Stock Inventor, 10

CARSON MOBIL (Continued) **1000288378**

FINDS:

Registry ID: 110002696235

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Registry ID: 110058258745

Environmental Interest/Information System
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000288378
Registry ID: 110002696235
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002696235

F36 **SHELL #204-1312-0609** **LUST** **S102436983**
SSE **20223 AVALON BLVD** **HIST CORTESE** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.197 mi.
1042 ft. **Site 3 of 6 in cluster F**

Relative:
Lower

Actual:
18 ft.

LUST:
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603701684
Global Id: T0603701684
Latitude: 33.847798
Longitude: -118.265886
Status: Completed - Case Closed
Status Date: 10/11/1996
Case Worker: YR
RB Case Number: 907460034
Local Agency: LOS ANGELES COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0603701684
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA

SHELL #204-1312-0609 (Continued) **S102436983**

Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603701684
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0603701684
Action Type: Other
Date: 06/16/1987
Action: Leak Stopped

Global Id: T0603701684
Action Type: Other
Date: 07/02/1987
Action: Leak Reported

Global Id: T0603701684
Action Type: Other
Date: 06/16/1987
Action: Leak Discovery

LUST:
Global Id: T0603701684
Status: Open - Case Begin Date
Status Date: 06/16/1987

Global Id: T0603701684
Status: Open - Site Assessment
Status Date: 01/24/1992

Global Id: T0603701684
Status: Completed - Case Closed
Status Date: 10/11/1996

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 907460034
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: NT
Global ID: T0603701684
W Global ID: Not reported
Staff: UNK

SHELL #204-1312-0609 (Continued) **S102436983**

Local Agency:	19000	
Cross Street:	DEL AMO	
Enforcement Type:	Not reported	
Date Leak Discovered:	6/16/1987	
Date Leak First Reported:		7/2/1987
Date Leak Record Entered:	8/12/1987	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	6/16/1987	
Date Case Last Changed on Database:		2/27/1997
Date the Case was Closed:		10/11/1996
How Leak Discovered:	Tank Test	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Piping	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5370.4296092886632310780196586
Source of Cleanup Funding:		Piping
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		1/24/1992
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	SHELL OIL PRODUCTS CO	
RP Address:	P.O. BOX 25370, SANTA ANA CA 92799	
Program:	LUST	
Lat/Long:	33.8480128 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	PREVIOUS REFERRAL FROM OWNER IN 1983. 1ST QUARTER REPORT-5/1/91 2ND QUARTER REPORT-7/17/91	

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	907460034

F37
SSE
1/8-1/4
0.197 mi.
1042 ft.

SHELL OIL COMPANY
20223 S AVALON BLVD
CARSON, CA 90745

Site 4 of 6 in cluster F

SWEEPS UST
CA FID UST
LOS ANGELES CO. HMS

S101585168
N/A

Relative:
Lower

Actual:
18 ft.

SWEEPS UST:

Status:	Active
Comp Number:	6469
Number:	1
Board Of Equalization:	44-000074
Referral Date:	03-15-90
Action Date:	03-15-90
Created Date:	06-30-89
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-000-006469-000001
Tank Status:	A
Capacity:	Not reported
Active Date:	06-30-89
Tank Use:	UNKNOWN
STG:	W
Content:	Not reported
Number Of Tanks:	4

Status:	Active
Comp Number:	6469
Number:	1
Board Of Equalization:	44-000074
Referral Date:	03-15-90
Action Date:	03-15-90
Created Date:	06-30-89
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-000-006469-000002
Tank Status:	A
Capacity:	Not reported
Active Date:	06-30-89
Tank Use:	UNKNOWN
STG:	W
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	6469
Number:	1
Board Of Equalization:	44-000074
Referral Date:	03-15-90
Action Date:	03-15-90
Created Date:	06-30-89
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-000-006469-000003
Tank Status:	A
Capacity:	Not reported
Active Date:	06-30-89
Tank Use:	UNKNOWN
STG:	W
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active

SHELL OIL COMPANY (Continued) **S101585168**

Comp Number: 6469
Number: 1
Board Of Equalization: 44-000074
Referral Date: 03-15-90
Action Date: 03-15-90
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-006469-000004
Tank Status: A
Capacity: 350
Active Date: 03-15-90
Tank Use: OIL
STG: W
Content: Not reported
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19020582
Regulated By: UTNKA
Regulated ID: 00006452
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2135184627
Mail To: Not reported
Mailing Address: 511 N BROOKHURST
Mailing Address 2: Not reported
Mailing City,St,Zip: CARSON 90745
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 006252-I06469
Facility Type: 01
Facility Status: Closed
Area: 22
Permit Number: 000010168
Permit Status: Closed

F38 **DEL AMO SHELL # 67656** **HIST UST** **S113089326**
SSE **20223 S AVALON** **HAZNET** **N/A**
1/8-1/4 **CARSON, CA 90745**
0.197 mi.
1042 ft. **Site 5 of 6 in cluster F**

Relative: **Lower**
Actual: **18 ft.**

HIST UST:
File Number: 0002849C
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002849C.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported

DEL AMO SHELL # 67656 (Continued) **S113089326**

Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

HAZNET:

envid:	S113089326
Year:	1999
GEPAID:	CAL000170211
Contact:	SAMI MERHI
Telephone:	3105329850
Mailing Name:	Not reported
Mailing Address:	20223 S AVALON
Mailing City,St,Zip:	CARSON, CA 907450000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Recycler
Tons:	.2293
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

envid:	S113089326
Year:	1998
GEPAID:	CAL000170211
Contact:	SAMI MERHI
Telephone:	3105329850
Mailing Name:	Not reported
Mailing Address:	20223 S AVALON
Mailing City,St,Zip:	CARSON, CA 907450000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Recycler
Tons:	.4586
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

F39 **DEL AMO SHELL (#1312-0609)** **UST** **U003939485**
SSE **20223 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.197 mi.
1042 ft. **Site 6 of 6 in cluster F**

Relative: UST:
Lower
Facility ID: 26241
Actual: Permitting Agency: LOS ANGELES COUNTY
18 ft. Latitude: 33.8493705
Longitude: -118.2638722

H40 **UNION OIL SERVICE STATION 565** **HIST UST** **U001566387**
SSE **20315 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90845**
0.236 mi.
1247 ft. **Site 1 of 4 in cluster H**

Relative: HIST UST:
Lower
File Number: 00028206
Actual: URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028206.pdf
18 ft. Region: STATE
Facility ID: 00000055489
Facility Type: Gas Station
Other Type: Not reported
Contact Name: ABRAHIM GHARIBEH
Telephone: 2135327822
Owner Name: UNION OIL COMPANY OF CALIFORNI
Owner Address: 3701 WILSHIRE BOULEVARD-SUITE
Owner City,St,Zip: LOS ANGELES, CA 90010
Total Tanks: 0001

Tank Num: 001
Container Num: 5651-00
Year Installed: Not reported
Tank Capacity: 00000607
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

H41 **SERVICE STATION 5651** **HIST UST** **U001565768**
SSE **20315 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90745**
0.236 mi.
1247 ft. **Site 2 of 4 in cluster H**

Relative: HIST UST:
Lower
File Number: 00028FD5
Actual: URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028FD5.pdf
18 ft. Region: STATE
Facility ID: 00000007576
Facility Type: Gas Station
Other Type: Not reported
Contact Name: IBRAHIM GHARIBEH
Telephone: 2135327822

SERVICE STATION 5651 (Continued) **U001565768**

Owner Name:	UNION OIL COMPANY OF CALIFORNI
Owner Address:	3701 WILSHIRE BLVD. SUITE 830
Owner City,St,Zip:	LOS ANGELES, CA 90010
Total Tanks:	0003
Tank Num:	001
Container Num:	5651-1
Year Installed:	1968
Tank Capacity:	00009940
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test
Tank Num:	002
Container Num:	5651-2
Year Installed:	1968
Tank Capacity:	00009940
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test
Tank Num:	003
Container Num:	5651-4
Year Installed:	1968
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, Pressure Test

Click here for Geo Tracker PDF:

H42 **MCDONALD'S RESTAURANT** **SWEEPS UST** **S104535928**
SSE **20315 AVALON BLVD** **LOS ANGELES CO. HMS** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.236 mi.
1247 ft. **Site 3 of 4 in cluster H**

Relative: **Lower**

Actual: **18 ft.**

SWEEPS UST:

Status:	Active
Comp Number:	2867
Number:	1
Board Of Equalization:	44-001057
Referral Date:	12-21-90
Action Date:	12-21-90
Created Date:	06-30-89
Owner Tank Id:	A1
SWRCB Tank Id:	19-000-002867-000001
Tank Status:	A
Capacity:	12000
Active Date:	12-21-90
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	3

MCDONALD'S RESTAURANT (Continued) **S104535928**

Status: Active
Comp Number: 2867
Number: 1
Board Of Equalization: 44-001057
Referral Date: 12-21-90
Action Date: 12-21-90
Created Date: 06-30-89
Owner Tank Id: C2
SWRCB Tank Id: 19-000-002867-000002
Tank Status: A
Capacity: 12000
Active Date: 12-21-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2867
Number: 1
Board Of Equalization: 44-001057
Referral Date: 12-21-90
Action Date: 12-21-90
Created Date: 06-30-89
Owner Tank Id: W.0.3
SWRCB Tank Id: 19-000-002867-000003
Tank Status: A
Capacity: 520
Active Date: 12-21-90
Tank Use: OIL
STG: W
Content: Not reported
Number Of Tanks: Not reported

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 002777-031708
Facility Type: 01
Facility Status: Permit
Area: 22
Permit Number: 000285113
Permit Status: Permit

Region: LA
Permit Category: I
Facility Id: 002777-I02867
Facility Type: 01
Facility Status: Removed
Area: 22
Permit Number: 000002151
Permit Status: Removed

H43 **UNOCAL #5651** **LUST** **S101295755**
SSE **20315 AVALON BLVD** **HIST CORTESE** **N/A**
1/8-1/4 **CARSON, CA 90745**
0.236 mi.
1247 ft. **Site 4 of 4 in cluster H**

Relative:
Lower

Actual:
18 ft.

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603702869
Global Id:	T0603702869
Latitude:	33.8471958
Longitude:	-118.2650233
Status:	Completed - Case Closed
Status Date:	08/26/1996
Case Worker:	YR
RB Case Number:	I-02867
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Aviation
Site History:	Not reported

LUST:

Global Id:	T0603702869
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603702869
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0603702869
Action Type:	Other
Date:	12/09/1992
Action:	Leak Reported

Global Id:	T0603702869
Action Type:	Other
Date:	07/16/1992
Action:	Leak Discovery

LUST:

Global Id:	T0603702869
Status:	Open - Case Begin Date
Status Date:	07/12/1992

UNOCAL #5651 (Continued) **S101295755**

Global Id: T0603702869
Status: Open - Site Assessment
Status Date: 07/12/1992

Global Id: T0603702869
Status: Completed - Case Closed
Status Date: 08/26/1996

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	I-02867	
Status:	Case Closed	
Substance:	1	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603702869	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	DEL AMO	
Enforcement Type:	Not reported	
Date Leak Discovered:	7/16/1992	
Date Leak First Reported:		12/9/1992
Date Leak Record Entered:	2/18/1993	
Date Confirmation Began:	7/12/1992	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		8/26/1996
Date the Case was Closed:		8/26/1996
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	Tank	
Operator:	IBRAHINI AHARIBEH	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5076.937144710311356269356859 9
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	

UNOCAL #5651 (Continued) **S101295755**

Responsible Party: UNOCAL CORP.
RP Address: 376 S VALENCIA AVE, BREA, CA 92621
Program: LUST
Lat/Long: 33.8471958 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-02867

G44 **EXXON SERVICE STAITON** **HIST UST** **U001565787**
SSE **20320 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.248 mi.
1310 ft. **Site 7 of 12 in cluster G**

Relative: **Lower**
Actual: **19 ft.**

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000029362
Facility Type: Gas Station
Other Type: Not reported
Contact Name: DANIEL MIRO
Telephone: 2135159484
Owner Name: EXXON COMPANY U.S.A.
Owner Address: 16945 NORTH CHASE BLVD.
Owner City,St,Zip: HOUSTON, TX 77210
Total Tanks: 0004

Tank Num: 001
Container Num: #1
Year Installed: 1970
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: #2
Year Installed: 1970
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003

EXXON SERVICE STAITON (Continued) **U001565787**

Container Num:	#3
Year Installed:	1970
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	004
Container Num:	#4
Year Installed:	1970
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

G45 **DELAMO PARK INC** **UST** **U003777722**
SSE **20320 AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.248 mi.
1310 ft. **Site 8 of 12 in cluster G**

Relative: UST:
Lower

Facility ID:	24894
Permitting Agency:	LOS ANGELES COUNTY
Latitude:	33.8484277
Longitude:	-118.2627447

Actual:
19 ft.

G46 **EXXON COMPANY USA - SS#73173** **SWEEPS UST** **S101583241**
SSE **20320 E AVALON BLVD** **CA FID UST** **N/A**
1/8-1/4 **CARSON, CA**
0.248 mi.
1310 ft. **Site 9 of 12 in cluster G**

Relative: SWEEPS UST:
Lower

Status:	Active
Comp Number:	45
Number:	9
Board Of Equalization:	44-000285
Referral Date:	06-30-89
Action Date:	Not reported
Created Date:	06-30-89
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-000-000045-000001
Tank Status:	A
Capacity:	Not reported
Active Date:	06-30-89
Tank Use:	UNKNOWN
STG:	W
Content:	Not reported
Number Of Tanks:	4

Actual:
19 ft.

Status:	Active
Comp Number:	45
Number:	9

EXXON COMPANY USA - SS#73173 (Continued) **S101583241**

Board Of Equalization: 44-000285
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-000045-000002
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 45
Number: 9
Board Of Equalization: 44-000285
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-000045-000003
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 45
Number: 9
Board Of Equalization: 44-000285
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-000045-000004
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19003151
Regulated By: UTNKA
Regulated ID: 00029362
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 8180000000
Mail To: Not reported
Mailing Address: 0 P O BOX

EXXON COMPANY USA - SS#73173 (Continued) **S101583241**

Mailing Address 2: Not reported
Mailing City,St,Zip: CARSON
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

G47 **EXXON RAS #7-3173** **HIST UST** **S113022652**
SSE **20320 SOUTH AVALON** **HAZNET** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.248 mi.
1310 ft. **Site 10 of 12 in cluster G**

Relative:
Lower

Actual:
19 ft.

HIST UST:
File Number: 000265DF
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000265DF.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

HAZNET:
envid: S113022652
Year: 1994
GEPAID: CAL000002766
Contact: EXXON CO USA
Telephone: 7136567761
Mailing Name: Not reported
Mailing Address: 800 BELL STE 2753X
Mailing City,St,Zip: HOUSTON, TX 770020000
Gen County: Not reported
TSD EPA ID: CAD982484933
TSD County: Not reported
Waste Category: Other empty containers 30 gallons or more
Disposal Method: Recycler
Tons: 12.5000
Cat Decode: Not reported

EXXON RAS #7-3173 (Continued) **S113022652**

Method Decode:	Not reported
Facility County:	Los Angeles
envid:	S113022652
Year:	1994
GEPAID:	CAL000002766
Contact:	EXXON CO USA
Telephone:	7136567761
Mailing Name:	Not reported
Mailing Address:	800 BELL STE 2753X
Mailing City,St,Zip:	HOUSTON, TX 770020000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	1.3761
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

G48 **DEL AMO PARK INC** **UST** **U004265157**
SSE **20320 S AVALON BLVD** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.248 mi.
1310 ft. **Site 11 of 12 in cluster G**

Relative: UST:
Lower

Facility ID:	LACoFA0004003
Permitting Agency:	Los Angeles County Fire Department
Latitude:	33.84711
Longitude:	-118.26412

Actual:
19 ft.

G49 **EXXON #7-3173** **LUST** **S102429423**
SSE **20320 AVALON BLVD E** **HIST CORTESE** **N/A**
1/8-1/4 **CARSON, CA 90746**
0.248 mi.
1310 ft. **Site 12 of 12 in cluster G**

Relative: LUST:
Lower

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603702658
Global Id:	T0603702658
Latitude:	33.847112
Longitude:	-118.26412
Status:	Completed - Case Closed
Status Date:	08/30/1996
Case Worker:	YR
RB Case Number:	I-00045
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Well used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Actual:
19 ft.

EXXON #7-3173 (Continued) **S102429423**

LUST:
Global Id: T0603702658
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603702658
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0603702658
Action Type: Other
Date: 02/21/1991
Action: Leak Stopped

Global Id: T0603702658
Action Type: Other
Date: 06/20/1991
Action: Leak Reported

Global Id: T0603702658
Action Type: Other
Date: 02/21/1991
Action: Leak Discovery

LUST:
Global Id: T0603702658
Status: Open - Case Begin Date
Status Date: 04/22/1989

Global Id: T0603702658
Status: Open - Remediation
Status Date: 04/22/1989

Global Id: T0603702658
Status: Open - Site Assessment
Status Date: 04/22/1989

Global Id: T0603702658
Status: Completed - Case Closed
Status Date: 08/30/1996

LUST REG 4:
Region: 4

EXXON #7-3173 (Continued) **S102429423**

Regional Board:	04	
County:	Los Angeles	
Facility Id:	I-00045	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Specific tank leak that has contaminated a specific well used for drinking water	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603702658	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	DEL AMO	
Enforcement Type:	Not reported	
Date Leak Discovered:	2/21/1991	
Date Leak First Reported:		6/20/1991
Date Leak Record Entered:	7/24/1991	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	2/21/1991	
Date Case Last Changed on Database:		12/31/1996
Date the Case was Closed:		8/30/1996
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	HOFFMAN, BRAD	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5082.941512656935143781222500 9
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		4/22/1989
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		4/22/1989
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	EXXON COMPANY U.S.A.	
RP Address:	2300 CLAYTON RD., SUITE #640, CONCORD, CA 94520	
Program:	LUST	
Lat/Long:	33.8471609 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	11/22/96 - WELL ABANDONMENT REPORT	

EXXON #7-3173 (Continued) **S102429423**

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-00045

50
SE
1/4-1/2
0.257 mi.
1356 ft.

ACTA SOUTH - DEL AMO BLVD GRADE SEPARATION **CPS-SLIC** **S106387098**
DEL AMO **N/A**
CARSON, CA 90810

Relative:
Lower

Actual:
19 ft.

CPS-SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 05/25/2001
Global Id: SL0603765866
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number: Not reported
Latitude: 33.84746
Longitude: -118.262914
Case Type: Cleanup Program Site
Case Worker: SH
Local Agency: Not reported
RB Case Number: 0747C6
File Location: Not reported
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 4:
Region: 4
Facility Status: No further action required
SLIC: 0747C6
Substance: TPH, VOCs
Staff: SH

I51
WNW
1/4-1/2
0.289 mi.
1526 ft.

GOODYEAR AIRSHIP OPER **SWF/LF** **S106831916**
19200 MAIN STREET **EMI** **N/A**
CARSON, CA 90247

Site 1 of 9 in cluster I

Relative:
Lower

Actual:
25 ft.

LOS ANGELES CO. LF:
Site ID: 1883
Alt. Address: 19800 South Main Street, Carson, CA 90746; 419 Easte 192nd Street, Carson, CA
Site Contact: Not reported
Site Contact Phone: Not reported
Site Email: Not reported
Site Website: Not reported
Site Type: Designated Waste Landfill
Site SWIS Number: 19-AQ-0014
Beginning Operation Date: 1948

GOODYEAR AIRSHIP OPER (Continued) **S106831916**

Ending Operation Date:	Dec-59
Local Enforcement Agency:	County Public Health
Maximun Depth Fill(Ft):	30
Permitted Capacity:	Not reported
Present Use:	Victoria Park Golf Course; Good-Year Blimp Site; Residential
Remaining Capacity(Million):	Not reported
Status:	Closed
Waste Accepted:	Commercial; Inert; Liquid; Residential
Hours of Operation:	Not reported
Disposal Area (Acre):	348

Detail As Of 01/2014:

Operator Name:	BKK Corporation (Carson)
Operator Address:	1550 127th Street
Operator City/State/Zip:	TORRANCE, CA
Operator Contact:	Ben Kazarian
Operator Telephone:	Not reported
Operator Email:	Not reported
Owner Name:	Multiple Owners (See Notes)
Owner Address:	Not reported
Owner City/State/Zip:	Not reported
Owner Contact:	Not reported
Owner Telephone:	Not reported
Owner Email:	Not reported

EMI:

Year:	1987
County Code:	19
Air Basin:	SC
Facility ID:	14386
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	14386
Air District Name:	SC
SIC Code:	5171
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

GOODYEAR AIRSHIP OPER (Continued) **S106831916**

Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr: 0

I52 **BKK PUBLIC DUMP -CARSON** **SWF/LF** **S103426815**
WNW **19200-19800 SOUTH MAIN ST** **N/A**
1/4-1/2 **CARSON, CA**
0.289 mi.
1526 ft. **Site 2 of 9 in cluster I**

Relative: **Lower**

Actual: **25 ft.**

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AQ-0014
Lat/Long:	33.85056 / -118.27778
Owner Name:	L.A. County (Vict. Park And Golf Course)
Owner Telephone:	8183337262
Owner Address:	Not reported
Owner Address2:	265 Cloverleaf Dr
Owner City,St,Zip:	Baldwin Park, CA 91706
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Pre-regulations
Landuse Name:	Urban,Residential,Park,Golf Course,Commercial
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Quarterly
Accepted Waste:	Inert,Mixed municipal,Other hazardous
Closure Date:	12/31/1959
Closure Type:	Estimated
Disposal Acreage:	$0.00
SWIS Num:	19-AQ-0014
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported
Lat/Long:	33.85056 / -118.27778

I53 **GOODYEAR AIRSHIP OPERATIO** **HIST CORTESE** **S105023883**
WNW **19200 MAIN** **NPDES** **N/A**
1/4-1/2 **GARDENA, CA 90248** **CIWQS**
0.289 mi.
1526 ft. **Site 3 of 9 in cluster I**

Relative:
Lower

Actual:
25 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	R-13099

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	435101
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I024086
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/19/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Goodyear Airship Operations
Discharge Address:	19200 South Main Street
Discharge City:	Gardena
Discharge State:	California
Discharge Zip:	90248
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported

GOODYEAR AIRSHIP OPERATIO (Continued) **S105023883**

DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	435101
Order No:	Not reported
Regulatory Measure Type:	Industrial
Place Id:	Not reported
WDID:	4 19I024086
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	02/19/2013
PROCESSED DATE:	02/19/2013
STATUS CODE NAME:	Active
STATUS DATE:	02/19/2013
PLACE SIZE:	27
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Kenny Rogers
FACILITY CONTACT TITLE:	Airship Base Administrator

GOODYEAR AIRSHIP OPERATIO (Continued) **S105023883**

FACILITY CONTACT PHONE:	310-327-2849
FACILITY CONTACT PHONE EXT:	121
FACILITY CONTACT EMAIL:	kenny_rogers@goodyear.com
OPERATOR NAME:	Goodyear Airship Operations
OPERATOR ADDRESS:	19200 South Main Street
OPERATOR CITY:	Gardena
OPERATOR STATE:	California
OPERATOR ZIP:	90248
OPERATOR CONTACT NAME:	Kenny Rogers
OPERATOR CONTACT TITLE:	Airship Base Administrator
OPERATOR CONTACT PHONE:	310-327-2849
OPERATOR CONTACT PHONE EXT:	121
OPERATOR CONTACT EMAIL:	kenny_rogers@goodyear.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Y
RECEIVING WATER NAME:	Dominguez Channel
CERTIFIER NAME:	Matthew St John
CERTIFIER TITLE:	Pilot in Charge
CERTIFICATION DATE:	24-FEB-15
PRIMARY SIC:	4581-Airports, Flying Fields, and Airport Terminal Services
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

CIWQS:

Agency:	Goodyear Airship Operations
Agency Address:	19200 South Main Street, Gardena , CA 90248
Place/Project Type:	Industrial - Airports, Flying Fields, and Airport Terminal Services
SIC/NAICS:	4581
Region:	4
Program:	INDSTW
Regulatory Measure Status:	Active

GOODYEAR AIRSHIP OPERATIO (Continued) **S105023883**

Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	4 19I024086
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	02/19/2013
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.85615
Longitude:	-118.27789

I54 **BKK CORPORATION-CARSON** **WMUDS/SWAT** **S103441304**
WNW **19200 SOUTH MAIN** **N/A**
1/4-1/2 **CARSON, CA**
0.289 mi.
1526 ft. **Site 4 of 9 in cluster I**

Relative: **Lower**

Actual: **25 ft.**

WMUDS/SWAT:

Edit Date:	Not reported
Complexity:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Base Meridian:	Not reported
NPID:	Not reported
Tonnage:	0
Regional Board ID:	51-02
Municipal Solid Waste:	False
Superorder:	False
Open To Public:	False
Waste List:	False
Agency Type:	Not reported
Agency Name:	BKK CORPORATION
Agency Department:	Not reported
Agency Address:	2210 SOUTH AZUSA AVENUE
Agency City,St,Zip:	WEST COVINA 91790
Agency Contact:	MR. KEN KAZARIAN, PRESIDENT
Agency Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City,St,Zip:	CA
Land Owner Contact:	Not reported
Land Owner Phone:	Not reported
Region:	4
Facility Type:	Not reported
Facility Description:	Not reported
Facility Telephone:	Not reported
SWAT Facility Name:	Not reported
Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported

BKK CORPORATION-CARSON (Continued) **S103441304**

Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	BKK CORPORATION
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	R_N
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	4 190020NUR
Solid Waste Information ID:	Not reported

I55 **BKK CARSON LANDFILL** **LUST S102430868**
WNW **19200 MAIN STREET** **LDS N/A**
1/4-1/2 **CARSON, CA 90248**
0.289 mi.
1526 ft. **Site 5 of 9 in cluster I**

Relative: **Lower**

Actual: **25 ft.**

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603705177
Global Id:	T0603705177
Latitude:	33.8554087
Longitude:	-118.2785838
Status:	Completed - Case Closed
Status Date:	07/24/1998
Case Worker:	JP
RB Case Number:	R-13099
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0603705177
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603705177
Contact Type:	Regional Board Caseworker
Contact Name:	JOSE PEREYRA
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN

BKK CARSON LANDFILL (Continued) **S102430868**

Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0603705177
Action Type: Other
Date: 05/01/1995
Action: Leak Reported

Global Id: T0603705177
Action Type: Other
Date: 05/01/1995
Action: Leak Stopped

Global Id: T0603705177
Action Type: Other
Date: 05/01/1995
Action: Leak Discovery

LUST:
Global Id: T0603705177
Status: Open - Case Begin Date
Status Date: 05/01/1995

Global Id: T0603705177
Status: Open - Site Assessment
Status Date: 04/24/1996

Global Id: T0603705177
Status: Open - Site Assessment
Status Date: 02/14/1997

Global Id: T0603705177
Status: Open - Site Assessment
Status Date: 03/17/1997

Global Id: T0603705177
Status: Open - Site Assessment
Status Date: 04/24/1998

Global Id: T0603705177
Status: Completed - Case Closed
Status Date: 07/24/1998

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: R-13099
Status: Case Closed
Substance: Diesel
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: Not reported

BKK CARSON LANDFILL (Continued) **S102430868**

Global ID:	T0603705177	
W Global ID:	Not reported	
Staff:	JP	
Local Agency:	19000	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	5/1/1995	
Date Leak First Reported:		5/1/1995
Date Leak Record Entered:	2/8/1996	
Date Confirmation Began:	4/24/1996	
Date Leak Stopped:	5/1/1995	
Date Case Last Changed on Database:		9/11/1998
Date the Case was Closed:		7/24/1998
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Piping	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2790.44539353086910383752450 23
Source of Cleanup Funding:		Piping
Preliminary Site Assessment Workplan Submitted:		2/14/1997
Preliminary Site Assessment Began:		3/17/1997
Pollution Characterization Began:		4/24/1998
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	GOODYEAR TIRE AND RUBBER CO.	
RP Address:	1144 MARKET ST E, AKRON, OH 44316	
Program:	LUST	
Lat/Long:	33.8258672 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	LOP/LOW - LOW POTENTIAL HEALTH/SAFTY/ENVIRONMENTAL IMPACT	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	USTS REPLACED W/AST'S. 3 GW WELLS INSTALLED FOR GW SAMPLING 06/22/98 - GW INVESTIGATION 06/23/98 - AVIATION FUEL STORAGE TANK REMOVAL RPT 08/14/98 - QTRLY GW MON RPT 1998	

LDS:

Global Id:	T10000006214
Latitude:	33.85061
Longitude:	-118.2745

BKK CARSON LANDFILL (Continued) **S102430868**

Case Type:	Land Disposal Site
Status:	Completed - Case Closed
Status Date:	05/22/2016
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Caseworker:	WY
Local Agency:	Not reported
RB Case Number:	51-002
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Not reported
EDR Link ID:	T10000006214
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

I56 **GOODYEAR AIRSHIP FACILITY** **ENVIROSTOR** **U002285889**
WNW **19200 SOUTH MAIN STREET** **VCP** **N/A**
1/4-1/2 **CARSON, CA 90248** **SWEEPS UST**
0.289 mi. **LOS ANGELES CO. HMS**
1526 ft. **Site 6 of 9 in cluster I**

Relative: **Lower**
Actual: **25 ft.**

ENVIROSTOR:

Facility ID:	60002022
Status:	Active
Status Date:	01/27/2016
Site Code:	401774
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	30
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Patrick Hsieh
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.85603
Longitude:	-118.2777
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	401675
Alias Type:	Project Code (Site Code)
Alias Name:	401774
Alias Type:	Project Code (Site Code)
Alias Name:	60002022
Alias Type:	Envirostor ID Number

Completed Info:

GOODYEAR AIRSHIP FACILITY (Continued) **U002285889**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/23/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 01/13/2016
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 60002022
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 30
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Patrick Hsieh
Supervisor: Robert Senga
Division Branch: Cleanup Cypress
Site Code: 401774
Assembly: 64
Senate: 35
Special Programs Code: Voluntary Cleanup Program
Status: Active
Status Date: 01/27/2016
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 33.85603 / -118.2777
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 401675
Alias Type: Project Code (Site Code)
Alias Name: 401774
Alias Type: Project Code (Site Code)
Alias Name: 60002022
Alias Type: Envirostor ID Number

Completed Info:

GOODYEAR AIRSHIP FACILITY (Continued) **U002285889**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/23/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 01/13/2016
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SWEEPS UST:
Status: Active
Comp Number: 13099
Number: 9
Board Of Equalization: 44-010048
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-013099-000001
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: 2

Status: Active
Comp Number: 13099
Number: 9
Board Of Equalization: 44-010048
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-013099-000002
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

GOODYEAR AIRSHIP FACILITY (Continued) **U002285889**

LOS ANGELES CO. HMS:
Region: LA
Permit Category: T
Facility Id: 012876-013099
Facility Type: 0
Facility Status: Removed
Area: 22
Permit Number: 00004830T
Permit Status: Removed

Region: LA
Permit Category: Not reported
Facility Id: 012876-I13099
Facility Type: Not reported
Facility Status: OPEN
Area: 22
Permit Number: Not reported
Permit Status: Not reported

J57 **BROADWAY--MAIN** **WMUDS/SWAT** **S103441307**
WNW **19101 SOUTH MAIN STREET** **N/A**
1/4-1/2 **CARSON, CA**
0.292 mi.
1544 ft. **Site 1 of 2 in cluster J**

Relative:
Lower

Actual:
26 ft.

WMUDS/SWAT:
Edit Date: Not reported
Complexity: Not reported
Primary Waste: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Base Meridian: Not reported
NPID: Not reported
Tonnage: 0
Regional Board ID: Not reported
Municipal Solid Waste: False
Superorder: False
Open To Public: False
Waste List: False
Agency Type: Not reported
Agency Name: BROADWAY-MAIN
Agency Department: Not reported
Agency Address: 19101 SOUTH MAIN STREET
Agency City,St,Zip: CARSON
Agency Contact: Not reported
Agency Telephone: Not reported
Land Owner Name: DOMINGUEZ PROPERTIES
Land Owner Address: 17420 SOUTH AVALON BLVD. NO. 2
Land Owner City,St,Zip: CARSON, CA 90746
Land Owner Contact: Not reported
Land Owner Phone: Not reported
Region: 4
Facility Type: Not reported
Facility Description: Not reported
Facility Telephone: Not reported
SWAT Facility Name: Not reported

BROADWAY--MAIN (Continued) **S103441307**

Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	BROADWAY-MAIN
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	R_N
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	4 190023NUR
Solid Waste Information ID:	Not reported

K58 **LIQUID CHEM CORP** **SEMS-ARCHIVE** **1003878821**
WNW **18911 S MAIN ST** **CAD981161094**
1/4-1/2 **CARSON, CA 90745**
0.300 mi.
1583 ft. **Site 1 of 3 in cluster K**

Relative:
Lower

Actual:
25 ft.

SEMS Archive:

Site ID:	902264
EPA ID:	CAD981161094
Cong District:	31
FIPS Code:	6037
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	9
Site ID:	902264
EPA ID:	CAD981161094
Site Name:	LIQUID CHEM CORP
NPL:	N
FF:	N
OU:	0
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1986-04-01 00:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	9
Site ID:	902264
EPA ID:	CAD981161094
Site Name:	LIQUID CHEM CORP
NPL:	N
FF:	N

LIQUID CHEM CORP (Continued) **1003878821**

OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1985-11-01 00:00:00
Finish Date:	1985-11-01 00:00:00
Qual:	Not reported
Current Action Lead:	St Perf
Region:	9
Site ID:	902264
EPA ID:	CAD981161094
Site Name:	LIQUID CHEM CORP
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1985-09-01 00:00:00
Finish Date:	1986-04-01 00:00:00
Qual:	N
Current Action Lead:	St Perf

59
WSW
1/4-1/2
0.300 mi.
1586 ft.

LA-405 DOMINGUEZ GOLF COURSE **ENVIROSTOR** **S108484742**
RIGHT-OF-WAY BETWEEN DEL AMO BLVD AND MAIN STREET (CALTRANS **VCP** **N/A**
CARSON, CA 90745

Relative:
Lower

Actual:
26 ft.

ENVIROSTOR:

Facility ID:	60000633
Status:	Inactive - Action Required
Status Date:	10/13/2010
Site Code:	401375
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	8
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Daniel Zogaib
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.85058
Longitude:	-118.2763
APN:	NONE SPECIFIED
Past Use:	LANDFILL - CONSTRUCTION, LANDFILL - DOMESTIC, LANDFILL - HAZARDOUS WASTE
Potential COC:	Under Investigation
Confirmed COC:	NONE SPECIFIED

LA-405 DOMINGUEZ GOLF COURSE (Continued) **S108484742**

Potential Description: OTH, SOIL
Alias Name: 110033607504
Alias Type: EPA (FRS #)
Alias Name: 401375
Alias Type: Project Code (Site Code)
Alias Name: 60000633
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 05/18/2007
Comments: Conditional approval of scope of work for investigation of 405 easement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 05/22/2007
Comments: Angle drilling to determine if waste exists under the freeway

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/16/2010
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 60000633
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 8
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Daniel Zogaib
Supervisor: Emad Yemut
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 401375
Assembly: 64
Senate: 35
Special Programs Code: Voluntary Cleanup Program
Status: Inactive - Action Required
Status Date: 10/13/2010

LA-405 DOMINGUEZ GOLF COURSE (Continued) **S108484742**

Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	33.85058 / -118.2763
APN:	NONE SPECIFIED
Past Use:	LANDFILL - CONSTRUCTION, LANDFILL - DOMESTIC, LANDFILL - HAZARDOUS WASTE
Potential COC:	31001
Confirmed COC:	NONE SPECIFIED
Potential Description:	OTH, SOIL
Alias Name:	110033607504
Alias Type:	EPA (FRS #)
Alias Name:	401375
Alias Type:	Project Code (Site Code)
Alias Name:	60000633
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	05/18/2007
Comments:	Conditional approval of scope of work for investigation of 405 easement.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	05/22/2007
Comments:	Angle drilling to determine if waste exists under the freeway
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	07/16/2010
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

60
SSE
1/4-1/2
0.306 mi.
1615 ft.

JERRY'S CLEANERS **CPS-SLIC S106717798**
516 CARSON PLAZA COURT **DRYCLEANERS N/A**
CARSON, CA 90746

Relative:
Lower

Actual:
19 ft.

CPS-SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	07/28/2010
Global Id:	SL0603758226
Lead Agency:	LOS ANGELES RWQCB (REGION 4)

JERRY'S CLEANERS (Continued) **S106717798**

Lead Agency Case Number:	Not reported
Latitude:	33.845976
Longitude:	-118.265826
Case Type:	Cleanup Program Site
Case Worker:	TA
Local Agency:	Not reported
RB Case Number:	1165
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Tetrachloroethylene (PCE)
Site History:	The Site has been a dry cleaning facility since the 1960s and Jerrys Cleaners operated at the Site since 1980. A limited soil and groundwater sampling and analysis program carried out at the Site, confirmed that soil and groundwater beneath the Site are impacted with volatile organic compounds (VOCs) including tetrachloroethylene (PCE), trichloroethylene (TCE), dichloroethylene (DCE) and Vinyl Chloride (VC). Based on the most recent analytical results reported by Iris Environmental, up to 840 a%g/Kg of PCE was detected in soil. Up to 16 a%g/L of PCE was detected in groundwater samples collected from the monitoring wells at the site. The three existing groundwater monitoring wells (MW-1, MW-2, MW-3) have been sampled intermittently at the Site. GSA Engineering, Inc. conducted a pilot soil vapor extraction (SVE) system from December 2006 and February 2007. Following the pilot study, GSA concluded that SVE system is a viable remediation method for the Site. The Carson Plaza Court is situated in the Dominguez Gap of the West Coast Basin of the Los Angeles Coastal Plain. The Site is underlain by Recent and Pleistocene alluvial sediments consisting of a mixture of clay, silt, sand and gravel which overlies the Gage aquifer. The maximum depth of investigation at the site is 21 feet. During subsurface investigation, groundwater was encountered between 9 to 11 feet below ground surface (bgs) at the Site. There are three groundwater monitoring wells at the Site and the groundwater flow direction is toward south-southeast.

Click here to access the California GeoTracker records for this facility:

DRYCLEANERS:

EPA Id:	CAD981580160
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	04/10/1987
Facility Active:	No
Inactive Date:	10/16/2008
Facility Addr2:	Not reported
Owner Name:	ALICIA CONTRERAS
Owner Address:	516 E CARSON PLAZA CT
Owner Address 2:	Not reported
Owner Telephone:	3105329092
Contact Name:	ALICE CONTRERAS
Contact Address:	516 E CARSON PLAZA CT
Contact Address 2:	Not reported
Contact Telephone:	3105329092
Mailing Name:	Not reported
Mailing Address 1:	516 E CARSON PLAZA CT

JERRY'S CLEANERS (Continued) **S106717798**

Mailing Address 2:	Not reported
Mailing City:	CARSON
Mailing State:	CA
Mailing Zip:	907463214
Owner Fax:	Not reported
Region Code:	3

J61 **CARSON CITY TOWING SERVICE** **LUST** **S104159923**
WNW **19135 MAIN ST S** **HIST CORTESE** **N/A**
1/4-1/2 **CARSON, CA 90745**
0.312 mi.
1650 ft. **Site 2 of 2 in cluster J**

Relative:
Lower

Actual:
24 ft.

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603704935
Global Id:	T0603704935
Latitude:	33.85692
Longitude:	-118.277851
Status:	Completed - Case Closed
Status Date:	06/29/1998
Case Worker:	JP
RB Case Number:	R-10383
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0603704935
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603704935
Contact Type:	Regional Board Caseworker
Contact Name:	JOSE PEREYRA
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0603704935
Action Type:	Other
Date:	06/26/1989
Action:	Leak Discovery

Global Id:	T0603704935
Action Type:	Other

CARSON CITY TOWING SERVICE (Continued) **S104159923**

Date: 06/26/1989
Action: Leak Reported

LUST:
Global Id: T0603704935
Status: Open - Case Begin Date
Status Date: 06/26/1989

Global Id: T0603704935
Status: Open - Site Assessment
Status Date: 09/26/1989

Global Id: T0603704935
Status: Completed - Case Closed
Status Date: 06/29/1998

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	R-10383	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603704935	
W Global ID:	Not reported	
Staff:	JP	
Local Agency:	19000	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	6/26/1989	
Date Leak First Reported:		6/26/1989
Date Leak Record Entered:	7/11/1989	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		10/5/1989
Date the Case was Closed:		6/29/1998
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	DPW #I-10383	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2790.44539353086910383752450 23
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		9/26/1989
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported

CARSON CITY TOWING SERVICE (Continued) **S104159923**

Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Yes
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: CARSON CITY TOWING SERVICE
RP Address: 19135 MAIN ST. S, CARSON CA 90745
Program: LUST
Lat/Long: 33.8258672 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: LOP/LOW - MINOR OR NO POTENTIAL WATER RESOURCE IMPACT
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: 1. NOT IN DPW-LOP FILES FILES (MAGIC LIST) AS I-10383 2. IN DPW OLD CASE #907450052

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: R-10383

K62
NW
1/4-1/2
0.326 mi.
1723 ft.

VENUS LABORATORIES INC **SEMS-ARCHIVE** **1003878866**
18903 S MAIN ST **CAD981413750**
CARSON, CA 90745

Site 2 of 3 in cluster K

Relative:
Lower

Actual:
24 ft.

SEMS Archive:
Site ID: 902329
EPA ID: CAD981413750
Cong District: 31
FIPS Code: 6037
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:
Region: 9
Site ID: 902329
EPA ID: CAD981413750
Site Name: VENUS LABORATORIES INC
NPL: N
FF: N
OU: 0
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1989-07-24 00:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

VENUS LABORATORIES INC (Continued) **1003878866**

Region:	9
Site ID:	902329
EPA ID:	CAD981413750
Site Name:	VENUS LABORATORIES INC
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1988-02-01 00:00:00
Qual:	L
Current Action Lead:	EPA Perf

Region:	9
Site ID:	902329
EPA ID:	CAD981413750
Site Name:	VENUS LABORATORIES INC
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	2
Start Date:	1986-04-01 00:00:00
Finish Date:	1987-07-01 00:00:00
Qual:	H
Current Action Lead:	St Perf

Region:	9
Site ID:	902329
EPA ID:	CAD981413750
Site Name:	VENUS LABORATORIES INC
NPL:	N
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1986-04-01 00:00:00
Finish Date:	1986-04-01 00:00:00
Qual:	Not reported
Current Action Lead:	St Perf

Region:	9
Site ID:	902329
EPA ID:	CAD981413750
Site Name:	VENUS LABORATORIES INC
NPL:	N
FF:	N
OU:	0
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	Not reported
Finish Date:	1989-07-24 00:00:00

VENUS LABORATORIES INC (Continued) **1003878866**

Qual: N
Current Action Lead: St Perf

K63 **VENUS LABORATORIES** **ENVIROSTOR** **S105023094**
NW **18903 SOUTH MAIN STREET** **HIST CORTESE** **N/A**
1/4-1/2 **CARSON, CA 90745**
0.326 mi.
1723 ft. **Site 3 of 3 in cluster K**

Relative: **Lower**
Actual: **24 ft.**

ENVIROSTOR:
Facility ID: 19280813
Status: Refer: Other Agency
Status Date: 06/01/1995
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Cypress
Assembly: Not reported
Senate: Not reported
Special Program: * CERC2
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.85892
Longitude: -118.2762
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: * HYDROCARBON SOLVENTS * CONTAMINATED SOIL * DETERGENT & SOAP * TANK BOTTOM WASTES * UNSPECIFIED ACID SOLUTION * UNSPECIFIED ALKALINE SOLUTIONS * UNSPECIFIED AQUEOUS SOLUTION * UNSPECIFIED OIL CONTAINING WASTE * OTHER PESTICIDE CONTAINERS, 30 GALLONS OR MORE
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: A C FABRICATORS INC
Alias Type: Alternate Name
Alias Name: SIMS WELDING
Alias Type: Alternate Name
Alias Name: 19280813
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Site Inspection (SI) Report
Completed Date: 09/30/1988
Comments: SUBMIT TO EPA NFA FOR EPA; LOW WASTE QUANTITY AND LOW ROUTE CHARACTERISTICS SITE INSP DONE SITE RECON TO DETERMINE SAMPLE POINTS NO VISIBLE WASTE PROBLEMS GROUNDWATER DATA FOR AREA DETERMINE FROM INFO GATHERED NO SAMPLING REQUIRED PENDING STATUS FOR DHS UNTIL COMPLETION OF HRS PACKAGE AND SWAT COMPLETED BY SIMS FOR RWQCB

VENUS LABORATORIES (Continued) **S105023094**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	01/06/1983
Comments:	FACILITY IDENTIFIED LA CHAM OF COMM BUS DIR 1971

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Discovery
Completed Date:	05/06/1980
Comments:	FACILITY IDENTIFIED IW SURVEY QUESTIONNAIRE 12580 QUESTIONNAIRE RECEIVED WASTE PRODUCED: MORE THAN 1000 GAL/YEAR

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	CALSI
Reg Id:	19280813

I64 **SOUTHWEST STEEL ROLLING MILLS #2** **SWF/LF** **S102360899**
WNW **19101 S. BROADWAY STREET** **N/A**
1/4-1/2 **GARDENA, CA**
0.342 mi.
1806 ft. **Site 7 of 9 in cluster I**

Relative:
Lower

Actual:
23 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AQ-5017
Lat/Long:	33.86111 / -118.27778
Owner Name:	Southern California Rapid Transit Distri
Owner Telephone:	2139726032
Owner Address:	Not reported
Owner Address2:	600 S. Spring St.
Owner City,St,Zip:	Carson, CA
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Industrial,Commercial
GIS Source:	Map

SOUTHWEST STEEL ROLLING MILLS #2 (Continued) **S102360899**

Category:	Disposal
Unit Number:	01
Inspection Frequency:	Annual
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	$0.00
SWIS Num:	19-AQ-5017
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported
Lat/Long:	33.86111 / -118.27778

I65 **BROADWAY & MAIN** **ENVIROSTOR** **S116490704**
WNW **19101 - 19145 SOUTH BROADWAY** **VCP** **N/A**
1/4-1/2 **CARSON, CA 90745**
0.342 mi.
1806 ft. **Site 8 of 9 in cluster I**

Relative: **Lower**

Actual: **23 ft.**

ENVIROSTOR:

Facility ID:	60001991
Status:	Active
Status Date:	04/24/2014
Site Code:	401669
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	2.7
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Maryam Tasnif-Abbasi
Division Branch:	Cleanup Cypress
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.85618
Longitude:	-118.2784
APN:	7339-016-007, 7339-016-008
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	7339-016-007
Alias Type:	APN
Alias Name:	7339-016-008
Alias Type:	APN
Alias Name:	401669
Alias Type:	Project Code (Site Code)
Alias Name:	60001991
Alias Type:	Envirostor ID Number

BROADWAY & MAIN (Continued) **S116490704**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	06/09/2014
Comments:	Information summary document
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	08/13/2014
Comments:	Approved Work Plan for field work.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/29/2014
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/10/2017
Comments:	This project was assigned to Maryam Tasnif-Abbasi
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/06/2017
Comments:	Project assigned to Tony Hashemian.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/26/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	07/10/2014
Comments:	Annual Cost Estimate for FY 1415 sent.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	04/24/2014
Comments:	VCA Fully Executed with KL Fenix Corporation
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/17/2015
Comments:	FY 1516 Cost Estimate completed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

BROADWAY & MAIN (Continued) **S116490704**

Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2016
Comments: FY 1617 Annual Oversight Cost Estimate completed and mailed.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2018
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Land Use Restriction
Schedule Due Date: 12/30/2017
Schedule Revised Date: Not reported

VCP:
Facility ID: 60001991
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 2.7
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Maryam Tasnif-Abbasi
Division Branch: Cleanup Cypress
Site Code: 401669
Assembly: 64
Senate: 35
Special Programs Code: Voluntary Cleanup Program
Status: Active
Status Date: 04/24/2014
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 33.85618 / -118.2784
APN: 7339-016-007, 7339-016-008
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 7339-016-007
Alias Type: APN
Alias Name: 7339-016-008
Alias Type: APN
Alias Name: 401669
Alias Type: Project Code (Site Code)
Alias Name: 60001991
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/09/2014
Comments: Information summary document

BROADWAY & MAIN (Continued) **S116490704**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 08/13/2014
Comments: Approved Work Plan for field work.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/29/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/10/2017
Comments: This project was assigned to Maryam Tasnif-Abbasi

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 04/06/2017
Comments: Project assigned to Tony Hashemian.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/26/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 07/10/2014
Comments: Annual Cost Estimate for FY 1415 sent.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 04/24/2014
Comments: VCA Fully Executed with KL Fenix Corporation

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/17/2015
Comments: FY 1516 Cost Estimate completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2016
Comments: FY 1617 Annual Oversight Cost Estimate completed and mailed.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification

BROADWAY & MAIN (Continued) **S116490704**

Future Due Date:	2018
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Land Use Restriction
Schedule Due Date:	12/30/2017
Schedule Revised Date:	Not reported

I66 **BROADWAY -MAIN LANDFILL** **SWF/LF** **S105678145**
WNW **19101-19145 SOUTH BROADWAY** **N/A**
1/4-1/2 **CARSON, CA**
0.342 mi.
1806 ft. **Site 9 of 9 in cluster I**

Relative:
Lower

Actual:
23 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AQ-0008
Lat/Long:	33.85624 / -118.27817
Owner Name:	Martin, Donna
Owner Telephone:	Not reported
Owner Address:	Not reported
Owner Address2:	2283 Valle Drive
Owner City,St,Zip:	La Habra Heights, CA 90631
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	Not reported
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Urban,Commercial
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Annual
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	Not reported
SWIS Num:	19-AQ-0008
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported
Lat/Long:	33.85624 / -118.27817

L67 **CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE)** **LUST** **S111121268**
SSE **708 CARSON** **NPDES** **N/A**
1/4-1/2 **CARSON, CA 90745** **CIWQS**
0.348 mi.
1840 ft. **Site 1 of 3 in cluster L**

Relative:
Lower

Actual:
20 ft.

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000000071
Global Id:	T10000000071
Latitude:	33.831322
Longitude:	-118.263267
Status:	Completed - Case Closed
Status Date:	03/17/2014
Case Worker:	MT
RB Case Number:	R-04918
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	04736-04918
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T10000000071
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T10000000071
Contact Type:	Regional Board Caseworker
Contact Name:	MARYAM TAIDY
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	mtaidy@waterboards.ca.gov
Phone Number:	2135766741

LUST:

Global Id:	T10000000071
Action Type:	ENFORCEMENT
Date:	02/15/2011
Action:	Staff Letter

Global Id:	T10000000071
Action Type:	Other
Date:	06/10/2008
Action:	Leak Reported

Global Id:	T10000000071
Action Type:	REMEDIATION
Date:	05/17/2010
Action:	Soil Vapor Extraction (SVE)

CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE) (Continued) **S111121268**

Global Id: T10000000071
Action Type: REMEDIATION
Date: 12/16/2011
Action: Free Product Removal

Global Id: T10000000071
Action Type: REMEDIATION
Date: 09/03/2009
Action: Ex Situ Physical/Chemical Treatment (other than P&T, SVE, or Excavation)

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 08/28/2009
Action: Staff Letter

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 08/31/2009
Action: Waste Discharge Requirements

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 01/17/2014
Action: Notification - Preclosure

Global Id: T10000000071
Action Type: REMEDIATION
Date: 07/01/2009
Action: Excavation

Global Id: T10000000071
Action Type: RESPONSE
Date: 01/15/2013
Action: Request for Closure - Regulator Responded

Global Id: T10000000071
Action Type: RESPONSE
Date: 08/20/2013
Action: Request for Closure - Regulator Responded

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 08/31/2009
Action: Waste Discharge Requirements

Global Id: T10000000071
Action Type: RESPONSE
Date: 07/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T10000000071
Action Type: RESPONSE
Date: 10/15/2009
Action: Soil and Water Investigation Report

Global Id: T10000000071
Action Type: ENFORCEMENT

CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE) (Continued) **S111121268**

Date: 02/16/2010
Action: Staff Letter

Global Id: T10000000071
Action Type: RESPONSE
Date: 07/15/2011
Action: Remedial Progress Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 07/15/2012
Action: Site Assessment Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 07/15/2010
Action: Remedial Progress Report

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 09/20/2010
Action: Notice to Comply

Global Id: T10000000071
Action Type: RESPONSE
Date: 02/15/2009
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 04/25/2012
Action: Staff Letter

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 03/17/2014
Action: Closure/No Further Action Letter

Global Id: T10000000071
Action Type: RESPONSE
Date: 07/15/2013
Action: Monitoring Report - Semi-Annually

Global Id: T10000000071
Action Type: RESPONSE
Date: 06/17/2014
Action: Well Destruction Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 08/19/2008
Action: Preliminary Site Assessment Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 11/15/2008
Action: Interim Remedial Action Plan

CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE) (Continued) **S111121268**

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 08/11/2008
Action: Staff Letter

Global Id: T10000000071
Action Type: RESPONSE
Date: 11/15/2008
Action: Soil and Water Investigation Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 01/15/2010
Action: Remedial Progress Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T10000000071
Action Type: RESPONSE
Date: 09/18/2008
Action: Other Report / Document

Global Id: T10000000071
Action Type: Other
Date: 05/02/2008
Action: Leak Discovery

Global Id: T10000000071
Action Type: RESPONSE
Date: 08/20/2013
Action: Interim Remedial Action Plan - Regulator Responded

Global Id: T10000000071
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 12/18/2008
Action: Staff Letter

Global Id: T10000000071
Action Type: RESPONSE
Date: 07/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T10000000071
Action Type: ENFORCEMENT

CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE) (Continued) **S111121268**

Date: 09/16/2008
Action: Notice to Comply

Global Id: T10000000071
Action Type: ENFORCEMENT
Date: 10/02/2008
Action: Staff Letter

Global Id: T10000000071
Action Type: RESPONSE
Date: 01/15/2012
Action: Remedial Progress Report

Global Id: T10000000071
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Semi-Annually

LUST:
Global Id: T10000000071
Status: Open - Case Begin Date
Status Date: 05/02/2008

Global Id: T10000000071
Status: Open - Site Assessment
Status Date: 05/02/2008

Global Id: T10000000071
Status: Open - Site Assessment
Status Date: 10/03/2008

Global Id: T10000000071
Status: Open - Remediation
Status Date: 08/28/2009

Global Id: T10000000071
Status: Open - Eligible for Closure
Status Date: 02/16/2010

Global Id: T10000000071
Status: Open - Remediation
Status Date: 02/16/2010

Global Id: T10000000071
Status: Completed - Case Closed
Status Date: 03/17/2014

NPDES:
Npdes Number: Not reported
Facility Status: Not reported
Agency Id: Not reported
Region: 4
Regulatory Measure Id: 359459
Order No: Not reported
Regulatory Measure Type: Construction

CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE) (Continued) **S111121268**

Place Id:	Not reported
WDID:	4 19C354574
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	02/04/2014
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	01/09/2009
PROCESSED DATE:	02/11/2009
STATUS CODE NAME:	Terminated
STATUS DATE:	03/24/2014
PLACE SIZE:	4.4
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Andrew Gross
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	310-820-4888
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Thomas Safran & Associates
OPERATOR ADDRESS:	11812 San Vicente Blvd Ste 600
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90049
OPERATOR CONTACT NAME:	Tyler Monroe
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	310-820-4888
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Thomas Safran & Associates
DEVELOPER ADDRESS:	11812 San Vicente Blvd Ste 600
DEVELOPER CITY:	Los Angeles
DEVELOPER STATE:	California
DEVELOPER ZIP:	90049
DEVELOPER CONTACT NAME:	Tyler Monroe
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	818-621-0615
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Y
CONSTYPE TRANSPORT IND:	Not reported

CARSON CITY CENTER (FORMER ECONO LUBE AND TUNE) (Continued) **S111121268**

CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Andrew Gross
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	11-JUN-10
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

CIWQS:

Agency:	Thomas Safran & Associates
Agency Address:	11812 San Vicente Blvd Ste 600, Los Angeles, CA 90049
Place/Project Type:	Construction - Residential
SIC/NAICS:	Not reported
Region:	4
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	4 19C354574
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	02/11/2009
Termination Date:	02/04/2014
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.831389
Longitude:	-118.263333

L68 **UNOCAL #2529** **LUST** **S101295782**
SSE **600 CARSON ST W** **HIST CORTESE** **N/A**
1/4-1/2 **CARSON, CA 90745**
0.350 mi.
1846 ft. **Site 2 of 3 in cluster L**

Relative: **Lower**

Actual: **20 ft.**

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603703189
Global Id:	T0603703189
Latitude:	33.831337
Longitude:	-118.286403
Status:	Completed - Case Closed
Status Date:	07/17/1996
Case Worker:	YR
RB Case Number:	I-06264
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported

UNOCAL #2529 (Continued) **S101295782**

Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0603703189
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603703189
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0603703189
Action Type: Other
Date: 07/31/1990
Action: Leak Discovery

Global Id: T0603703189
Action Type: Other
Date: 07/31/1990
Action: Leak Stopped

Global Id: T0603703189
Action Type: Other
Date: 01/03/1990
Action: Leak Reported

LUST:
Global Id: T0603703189
Status: Open - Case Begin Date
Status Date: 01/03/1990

Global Id: T0603703189
Status: Open - Site Assessment
Status Date: 08/02/1990

Global Id: T0603703189
Status: Open - Site Assessment
Status Date: 01/21/1992

Global Id: T0603703189
Status: Open - Remediation
Status Date: 10/14/1994

Global Id: T0603703189

UNOCAL #2529 (Continued) **S101295782**

Status: Completed - Case Closed
Status Date: 07/17/1996

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	I-06264	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603703189	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19000	
Cross Street:	FIGUEROA ST	
Enforcement Type:	Not reported	
Date Leak Discovered:	7/31/1990	
Date Leak First Reported:		1/3/1990
Date Leak Record Entered:	12/2/1990	
Date Confirmation Began:	8/2/1990	
Date Leak Stopped:	7/31/1990	
Date Case Last Changed on Database:		9/6/1996
Date the Case was Closed:		7/17/1996
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		5916.650780646456117522290551 7
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		1/21/1992
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		10/14/1994
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	UNOCAL CORPORATION	
RP Address:	376 S VALENCIA AVE, BREA CA 92621	
Program:	LUST	
Lat/Long:	33.8314278 / -1	
Local Agency Staff:	Not reported	

UNOCAL #2529 (Continued) **S101295782**

Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: ROUTINE TANK REPLACEMENT. NO OBVIOUS SOURCE OF LEAKAGE. CONTAMINATED ARE CONFINED TO TURBINE-END OF OLD TANK HOLE. 09/06/96 WELL ABANDONMENT REPORT

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-06264

69
WNW
1/4-1/2
0.352 mi.
1859 ft.

MOR-GLOW PAINT COMPANY
18937 S. MAIN STREET
CARSON, CA 90248

SWF/LF **S103441366**
WMUDS/SWAT **N/A**
LDS

Relative:
Lower

Actual:
24 ft.

LOS ANGELES CO. LF:
Site ID: 2257
Alt. Address: 18934 South Main Street, Carson, CA
Site Contact: Not reported
Site Contact Phone: Not reported
Site Email: Not reported
Site Website: Not reported
Site Type: Inert Landfill
Site SWIS Number: 19-AQ-5028
Beginning Operation Date: Mar-52
Ending Operation Date: Dec-55
Local Enforcement Agency: Not reported
Maximun Depth Fill(Ft): Not reported
Permitted Capacity: Not reported
Present Use: Industrial
Remaining Capacity(Million): Not reported
Status: Closed
Waste Accepted: Inert
Hours of Operation: Not reported
Disposal Area (Acre): 2

Detail As Of 01/2014:
Operator Name: Mor-Glow Paint
Operator Address: Not reported
Operator City/State/Zip: Not reported
Operator Contact: Not reported
Operator Telephone: Not reported
Operator Email: Not reported
Owner Name: Altawood Aerosols
Owner Address: 4300 PROMENADE WAY #319
Owner City/State/Zip: MARINA DEL REY, CA 90292
Owner Contact: Herbert Gleicke
Owner Telephone: Not reported
Owner Email: Not reported

WMUDS/SWAT:

MOR-GLOW PAINT COMPANY (Continued) **S103441366**

Edit Date:	Not reported
Complexity:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Base Meridian:	Not reported
NPID:	Not reported
Tonnage:	0
Regional Board ID:	52-52
Municipal Solid Waste:	False
Superorder:	False
Open To Public:	False
Waste List:	False
Agency Type:	Not reported
Agency Name:	MOR-GLOW PAINT COMPANY
Agency Department:	Not reported
Agency Address:	Not reported
Agency City,St,Zip:	Not reported
Agency Contact:	Not reported
Agency Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City,St,Zip:	CA
Land Owner Contact:	Not reported
Land Owner Phone:	Not reported
Region:	4
Facility Type:	Not reported
Facility Description:	Not reported
Facility Telephone:	Not reported
SWAT Facility Name:	Not reported
Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	MOR-GLOW PAINT COMPANY
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	R_N
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	4 190096NUR
Solid Waste Information ID:	Not reported

LDS:

Global Id:	T10000004934
Latitude:	33.85951
Longitude:	-118.2762

MOR-GLOW PAINT COMPANY (Continued) **S103441366**

Case Type:	Land Disposal Site
Status:	Completed - Case Closed
Status Date:	05/26/2016
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Caseworker:	WY
Local Agency:	Not reported
RB Case Number:	52-052
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Not reported
EDR Link ID:	T10000004934
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

L70 **MOBIL #11-MBT** **LUST S104406545**
SSE **655 CARSON ST E** **HIST CORTESE N/A**
1/4-1/2 **CARSON, CA 90745**
0.357 mi.
1883 ft. **Site 3 of 3 in cluster L**

Relative: **Lower**

Actual: **20 ft.**

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603766538
Global Id:	T0603766538
Latitude:	33.8319748959952
Longitude:	-118.264067173004
Status:	Completed - Case Closed
Status Date:	09/30/2010
Case Worker:	MT
RB Case Number:	I-00062A
Local Agency:	LOS ANGELES COUNTY
File Location:	Regional Board
Local Case Number:	00062-00062
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0603766538
Contact Type:	Local Agency Caseworker
Contact Name:	GILLIAN MINTIER
Organization Name:	LOS ANGELES COUNTY
Address:	900 SOUTH FREMONT AVE
City:	ALHAMBRA
Email:	gmintier@ladpw.org
Phone Number:	Not reported

Global Id:	T0603766538
Contact Type:	Regional Board Caseworker
Contact Name:	MARYAM TAIDY
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	mtaidy@waterboards.ca.gov

MOBIL #11-MBT (Continued) **S104406545**

Phone Number: 2135766741

LUST:
Global Id: T0603766538
Action Type: RESPONSE
Date: 07/02/0607
Action: Other Report / Document

Global Id: T0603766538
Action Type: RESPONSE
Date: 10/15/2008
Action: Soil and Water Investigation Report

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/23/2009
Action: Soil and Water Investigation Report

Global Id: T0603766538
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/15/2008
Action: Soil and Water Investigation Workplan

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: Other
Date: 05/20/2005
Action: Leak Reported

Global Id: T0603766538
Action Type: RESPONSE
Date: 10/30/2007
Action: Soil and Water Investigation Report

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/15/2008
Action: Interim Remedial Action Plan

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

MOBIL #11-MBT (Continued) **S104406545**

Global Id: T0603766538
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: RESPONSE
Date: 10/15/2008
Action: CAP/RAP - Other Report

Global Id: T0603766538
Action Type: REMEDIATION
Date: 04/02/2007
Action: Not reported

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 01/08/2008
Action: Staff Letter

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 09/09/2010
Action: Notification - Preclosure

Global Id: T0603766538
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 06/26/2007
Action: Staff Letter

Global Id: T0603766538
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/11/2007
Action: Soil and Water Investigation Workplan

Global Id: T0603766538
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: ENFORCEMENT

MOBIL #11-MBT (Continued) **S104406545**

Date: 07/31/2008
Action: Staff Letter

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 07/31/2008
Action: Staff Letter

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 09/30/2010
Action: Closure/No Further Action Letter

Global Id: T0603766538
Action Type: RESPONSE
Date: 11/16/2009
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0603766538
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0603766538
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603766538
Action Type: Other
Date: 04/19/2005
Action: Leak Discovery

Global Id: T0603766538
Action Type: ENFORCEMENT
Date: 05/02/2008
Action: 13267 Requirement

LUST:
Global Id: T0603766538
Status: Open - Case Begin Date
Status Date: 04/18/2005

Global Id: T0603766538
Status: Open - Site Assessment
Status Date: 04/18/2005

Global Id: T0603766538
Status: Open - Site Assessment
Status Date: 04/02/2007

Global Id: T0603766538
Status: Open - Site Assessment
Status Date: 07/11/2007

Global Id: T0603766538
Status: Open - Site Assessment

MOBIL #11-MBT (Continued) **S104406545**

Status Date: 07/30/2008

Global Id: T0603766538
Status: Completed - Case Closed
Status Date: 09/30/2010

Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603702661
Global Id: T0603702661
Latitude: 33.832001
Longitude: -118.264079
Status: Completed - Case Closed
Status Date: 10/10/1996
Case Worker: YR
RB Case Number: I-00062
Local Agency: LOS ANGELES COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T0603702661
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603702661
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

LUST:
Global Id: T0603702661
Action Type: Other
Date: 05/31/1990
Action: Leak Discovery

Global Id: T0603702661
Action Type: Other
Date: 05/31/1990
Action: Leak Stopped

Global Id: T0603702661
Action Type: Other
Date: 06/01/1990

MOBIL #11-MBT (Continued) **S104406545**

Action: Leak Reported

LUST:
Global Id: T0603702661
Status: Open - Case Begin Date
Status Date: 05/31/1990

Global Id: T0603702661
Status: Open - Site Assessment
Status Date: 08/13/1990

Global Id: T0603702661
Status: Open - Site Assessment
Status Date: 03/21/1991

Global Id: T0603702661
Status: Completed - Case Closed
Status Date: 10/10/1996

Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000009136
Global Id: T10000009136
Latitude: 33.832
Longitude: -118.26408
Status: Completed - Case Closed
Status Date: 09/11/2017
Case Worker: MB
RB Case Number: I-00062B
Local Agency: Not reported
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T10000009136
Contact Type: Regional Board Caseworker
Contact Name: MAGDY BAIADY
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: LOS ANGELES
Email: mbaiady@waterboards.ca.gov
Phone Number: 2135766699

LUST:
Global Id: T10000009136
Action Type: Other
Date: 07/07/2016
Action: Leak Reported

Global Id: T10000009136
Action Type: RESPONSE
Date: 09/11/2016
Action: Other Report / Document

MOBIL #11-MBT (Continued) **S104406545**

Global Id: T10000009136
Action Type: ENFORCEMENT
Date: 08/11/2016
Action: Staff Letter

Global Id: T10000009136
Action Type: RESPONSE
Date: 03/07/2017
Action: Interim Remedial Action Report

Global Id: T10000009136
Action Type: RESPONSE
Date: 05/15/2017
Action: Request for Closure - Regulator Responded

Global Id: T10000009136
Action Type: ENFORCEMENT
Date: 07/07/2016
Action: Referral to Regional Board

Global Id: T10000009136
Action Type: ENFORCEMENT
Date: 09/27/2016
Action: Staff Letter

Global Id: T10000009136
Action Type: RESPONSE
Date: 08/25/2016
Action: Removal Action Work Plan - Regulator Responded

Global Id: T10000009136
Action Type: ENFORCEMENT
Date: 09/11/2017
Action: Closure/No Further Action Letter

Global Id: T10000009136
Action Type: RESPONSE
Date: 03/07/2017
Action: Soil and Water Investigation Report

Global Id: T10000009136
Action Type: Other
Date: 07/07/2016
Action: Leak Began

Global Id: T10000009136
Action Type: ENFORCEMENT
Date: 06/20/2017
Action: Notification - Preclosure

Global Id: T10000009136
Action Type: Other
Date: 07/07/2016
Action: Leak Discovery

LUST:
Global Id: T10000009136

MOBIL #11-MBT (Continued) **S104406545**

Status: Open - Case Begin Date
Status Date: 07/07/2016

Global Id: T10000009136
Status: Open - Inactive
Status Date: 07/14/2016

Global Id: T10000009136
Status: Open - Site Assessment
Status Date: 09/27/2016

Global Id: T10000009136
Status: Open - Eligible for Closure
Status Date: 06/20/2017

Global Id: T10000009136
Status: Completed - Case Closed
Status Date: 09/11/2017

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: I-00062
Status: Case Closed
Substance: Waste Oil
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: Not reported
Global ID: T0603702661
W Global ID: Not reported
Staff: UNK
Local Agency: 19000
Cross Street: Not reported
Enforcement Type: Not reported
Date Leak Discovered: 5/31/1990
Date Leak First Reported: 6/1/1990
Date Leak Record Entered: 8/8/1990
Date Confirmation Began: Not reported
Date Leak Stopped: 5/31/1990
Date Case Last Changed on Database: 11/26/1996
Date the Case was Closed: 10/10/1996
How Leak Discovered: Tank Test
How Leak Stopped: Not reported
Cause of Leak: UNK
Leak Source: Piping
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 791.16338111254045229881705842
Source of Cleanup Funding: Piping
Preliminary Site Assessment Workplan Submitted: 8/13/1990
Preliminary Site Assessment Began: 8/13/1990
Pollution Characterization Began: 3/21/1991
Remediation Plan Submitted: Not reported

MOBIL #11-MBT (Continued) **S104406545**

Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: MOBIL OIL CORP.
RP Address: 3800 ALAMEDA AVE W, STE 700, BURBANK, CA 91505
Program: LUST
Lat/Long: 33.8318631 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: 11/26/96 - ABANDONMENT OF 7 GW MONITORING WELLS

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-00062

M71 **THRIFTY #267 (FORMER)** **LUST** **S103587528**
NNE **18523 AVALON BLVD S** **N/A**
1/4-1/2 **CARSON, CA 90746**
0.360 mi.
1902 ft. **Site 1 of 2 in cluster M**

Relative:
Lower

Actual:
26 ft.

LUST:
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603703086
Global Id: T0603703086
Latitude: 33.8621516
Longitude: -118.2663175
Status: Completed - Case Closed
Status Date: 07/13/2015
Case Worker: MB
RB Case Number: I-05581
Local Agency: LOS ANGELES COUNTY
File Location: Regional Board
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0603703086
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY

THRIFTY #267 (FORMER) (Continued) **S103587528**

Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603703086
Contact Type: Regional Board Caseworker
Contact Name: MAGDY BAIADY
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: LOS ANGELES
Email: mbaiady@waterboards.ca.gov
Phone Number: 2135766699

LUST:
Global Id: T0603703086
Action Type: Other
Date: 05/13/1988
Action: Leak Discovery

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 09/18/2014
Action: Request for Closure - Regulator Responded

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2014
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: REMEDIATION

THRIFTY #267 (FORMER) (Continued) **S103587528**

Date: 03/01/1990
Action: Free Product Removal

Global Id: T0603703086
Action Type: ENFORCEMENT
Date: 01/21/2014
Action: Staff Letter

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2013
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: REMEDIATION
Date: 02/28/2005
Action: Pump & Treat (P&T) Groundwater

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 09/09/2010
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2009
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/16/2009
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2014
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2011
Action: Monitoring Report - Semi-Annually

THRIFTY #267 (FORMER) (Continued) **S103587528**

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: Other
Date: 12/30/1986
Action: Leak Reported

Global Id: T0603703086
Action Type: RESPONSE
Date: 12/29/2013
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/28/2003
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2002
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: ENFORCEMENT

THRIFTY #267 (FORMER) (Continued) **S103587528**

Date: 07/13/2015
Action: Closure/No Further Action Letter

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2010
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2012
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: ENFORCEMENT
Date: 01/28/2003
Action: * No Action

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2005
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/12/2006
Action: Unknown

Global Id: T0603703086
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603703086
Action Type: ENFORCEMENT
Date: 04/18/2006
Action: Staff Letter

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2009
Action: Remedial Progress Report

THRIFTY #267 (FORMER) (Continued) **S103587528**

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2008
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 06/17/2013
Action: Request for Closure - Regulator Responded

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/28/2014
Action: Site Assessment Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 07/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2013
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 03/03/2015
Action: Well Destruction Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: RESPONSE

THRIFTY #267 (FORMER) (Continued) **S103587528**

Date: 01/15/2011
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 10/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: RESPONSE
Date: 04/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603703086
Action Type: ENFORCEMENT
Date: 10/23/2014
Action: Notification - Preclosure

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/12/2012
Action: Remedial Progress Report

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603703086
Action Type: RESPONSE
Date: 01/15/2010
Action: Remedial Progress Report

LUST:
Global Id: T0603703086
Status: Open - Case Begin Date
Status Date: 12/30/1986

Global Id: T0603703086
Status: Open - Site Assessment
Status Date: 12/30/1986

Global Id: T0603703086
Status: Open - Site Assessment
Status Date: 09/18/1987

Global Id: T0603703086

THRIFTY #267 (FORMER) (Continued) **S103587528**

Status: Open - Remediation
Status Date: 03/04/1988

Global Id: T0603703086
Status: Open - Site Assessment
Status Date: 03/04/1988

Global Id: T0603703086
Status: Completed - Case Closed
Status Date: 07/13/2015

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	I-05581	
Status:	Remediation Plan	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Remove Free Product
Global ID:	T0603703086	
W Global ID:	Not reported	
Staff:	MB	
Local Agency:	19000	
Cross Street:	185TH	
Enforcement Type:	None Taken	
Date Leak Discovered:	5/13/1988	
Date Leak First Reported:		12/30/1986
Date Leak Record Entered:	8/11/1987	
Date Confirmation Began:	12/30/1986	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		7/26/2002
Date the Case was Closed:		Not reported
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	CIRCLE K	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		10504.029289957625922825732139
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		9/18/1987
Pollution Characterization Began:		3/4/1988
Remediation Plan Submitted:		3/4/1988
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		6/19/2002
Hist Max MTBE Conc in Groundwater:		66200
Hist Max MTBE Conc in Soil:		4070
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	=	

THRIFTY #267 (FORMER) (Continued) **S103587528**

Soil Qualifier:	=
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	MARIA ZRUPKO
RP Address:	10000 LAKEWOOD BLVD
Program:	LUST
Lat/Long:	33.8621516 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	UNCERTAIN. CONTINUE GW MONITORING. USTS REPLACED; 1/25/00 REVISED SITE INVESTIGATION WORKPLAN; 4/26/00 1ST QTR GW MON RPT 2000; 7/28/00 2ND QTR GW MON RPT 2000; 10/19/00 3RD QTR MON RPT 2000; 1/30/01 4TH QTR GW MON RPT 2000

M72 **THRIFTY #267 (FORMER)** **HAZNET** **S101295763**
NNE **18523 AVALON** **HIST CORTESE** **N/A**
1/4-1/2 **CARSON, CA 90746**
0.360 mi.
1902 ft. **Site 2 of 2 in cluster M**

Relative: **Lower**
Actual: **26 ft.**

HAZNET:

envid:	S101295763
Year:	2016
GEPAID:	CAL000385700
Contact:	JAMES BECK
Telephone:	5624956814
Mailing Name:	Not reported
Mailing Address:	19100 RIDGEWOOD PKWY
Mailing City,St,Zip:	SAN ANTONIO, TX 782590000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Other organic solids
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.01
Cat Decode:	Other organic solids
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Los Angeles

envid:	S101295763
Year:	2016
GEPAID:	CAL000385700
Contact:	JAMES BECK
Telephone:	5624956814
Mailing Name:	Not reported
Mailing Address:	19100 RIDGEWOOD PKWY
Mailing City,St,Zip:	SAN ANTONIO, TX 782590000
Gen County:	Los Angeles
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

THRIFTY #267 (FORMER) (Continued) **S101295763**

	Organics Recovery Ect
Tons:	0.021
Cat Decode:	Aqueous solution with total organic residues less than 10 percent
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles
envid:	S101295763
Year:	2015
GEPAID:	CAL000385700
Contact:	ROSIE RANGEL
Telephone:	2106266564
Mailing Name:	Not reported
Mailing Address:	19100 RIDGEWOOD PKWY
Mailing City,St,Zip:	SAN ANTONIO, TX 782590000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Other organic solids
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.0775
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	S101295763
Year:	2015
GEPAID:	CAL000385700
Contact:	ROSIE RANGEL
Telephone:	2106266564
Mailing Name:	Not reported
Mailing Address:	19100 RIDGEWOOD PKWY
Mailing City,St,Zip:	SAN ANTONIO, TX 782590000
Gen County:	Los Angeles
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.42
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles
envid:	S101295763
Year:	2014
GEPAID:	CAL000385700
Contact:	ROSIE RANGEL
Telephone:	2106266564
Mailing Name:	Not reported
Mailing Address:	19100 RIDGEWOOD PKWY
Mailing City,St,Zip:	SAN ANTONIO, TX 782590000
Gen County:	Los Angeles
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Aqueous solution with total organic residues less than 10 percent

THRIFTY #267 (FORMER) (Continued) **S101295763**

Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.021
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Los Angeles

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-05581

N73 **SHELL CHEMICAL CORP, CARSON #1** **SWF/LF** **S106079145**
West **19401 SOUTH MAIN STREET** **N/A**
1/4-1/2 **GARDENA, CA**
0.374 mi.
1974 ft. **Site 1 of 2 in cluster N**

Relative: **Lower**

Actual: **23 ft.**

SWF/LF (SWIS):
Region: STATE
Facility ID: 19-AQ-5029
Lat/Long: 33.8546 / -118.2795
Owner Name: KL Fenix
Owner Telephone: 3108515888
Owner Address: Kim Young. President
Owner Address2: 19401 South Main Street
Owner City,St,Zip: Gardena, CA 90248
Operational Status: Closed
Operator: Not reported
Operator Phone: Not reported
Operator Address: Not reported
Operator Address2: Not reported
Operator City,St,Zip: Not reported
Permit Date: Not reported
Permit Status: Not reported
Permitted Acreage: $0.00
Activity: Solid Waste Disposal Site
Regulation Status: Unpermitted
Landuse Name: Commercial
GIS Source: Map
Category: Disposal
Unit Number: 01
Inspection Frequency: Annual
Accepted Waste: Not reported
Closure Date: 04/09/1975
Closure Type: Actual
Disposal Acreage: $0.00
SWIS Num: 19-AQ-5029
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: Not reported
Actual Throughput with Units: Not reported
Permitted Capacity with Units: Not reported

SHELL CHEMICAL CORP, CARSON #1 (Continued) **S106079145**

Remaining Capacity: Not reported
Remaining Capacity with Units: Not reported
Lat/Long: 33.8546 / -118.2795

N74 **SHELL CHEMICAL CORPORATION - CARSON #1** **SWF/LF** **S102798774**
West **19401 SOUTH MAIN STREET** **N/A**
1/4-1/2 **CARSON, CA**
0.374 mi.
1974 ft. **Site 2 of 2 in cluster N**

Relative:
Lower

Actual:
23 ft.

LOS ANGELES CO. LF:

Site ID:	2256
Alt. Address:	19500 South Moneta Avenue, Carson, CA
Site Contact:	Not reported
Site Contact Phone:	Not reported
Site Email:	Not reported
Site Website:	Not reported
Site Type:	Municipal Solid Waste Landfill
Site SWIS Number:	19-AQ-5029
Beginning Operation Date:	1957
Ending Operation Date:	1972
Local Enforcement Agency:	County Public Health
Maximun Depth Fill(Ft):	11
Permitted Capacity:	Not reported
Present Use:	Industrial
Remaining Capacity(Million):	Not reported
Status:	Closed
Waste Accepted:	Not reported
Hours of Operation:	Not reported
Disposal Area (Acre):	3

Detail As Of 01/2014:

Operator Name:	Cobot, Cobot & Forbes
Operator Address:	Not reported
Operator City/State/Zip:	Not reported
Operator Contact:	Not reported
Operator Telephone:	Not reported
Operator Email:	Not reported
Owner Name:	KL Fenix
Owner Address:	19401 South Main Street
Owner City/State/Zip:	Gardena, CA 90248
Owner Contact:	Kim Young
Owner Telephone:	(310) 851-5888
Owner Email:	Not reported

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75 **NISSAN NORTH AMERICA, INC.** **CPS-SLIC** **S108418275**
NW **125 GRIFFITH** **N/A**
1/4-1/2 **CARSON, CA 90248**
0.375 mi.
1979 ft.

Relative:
Lower

Actual:
23 ft.

CPS-SLIC:

Region:	STATE
Facility Status:	**Open - Assessment & Interim Remedial Action**
Status Date:	03/12/2015
Global Id:	T0603719669
Lead Agency:	LOS ANGELES RWQCB (REGION 4)

NISSAN NORTH AMERICA, INC. (Continued) **S108418275**

Lead Agency Case Number:	Not reported
Latitude:	33.86042
Longitude:	-118.276599
Case Type:	Cleanup Program Site
Case Worker:	GAC
Local Agency:	Not reported
RB Case Number:	1251
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply, Soil, Soil Vapor
Potential Contaminants of Concern:	Tetrachloroethylene (PCE), Trichloroethylene (TCE), Vinyl chloride
Site History:	Historic aerial photographs from 1956 and 1965 indicate the property addressed as 101, 111 and 125 West Griffith Street was utilized as an automobile junkyard prior to construction of the present-day facilities. Former Nissan Building H-125 (125 West Griffith Street) was constructed in 1982. During ownership of the site by NNA, the building was occupied by an automobile service center, as well as automobile showrooms and meeting rooms in two adjacent buildings (101 and 111 West Griffith Street) from approximately 1984 to 2006. Currently, the subject property and subject building are used for the storage of new automobiles. During the removal of a 550-gallon waste-oil UST, seven remote-fill ports, and a remote-fill line in September 2006, soil contamination was detected at the subject site. Low levels of Total Recoverable Petroleum Hydrocarbons (TRPH) were detected in soil samples collected from shallow imported fill soils beneath the remote-fill line (approximately 3 to 4 feet below ground surface [bgs]). TRPH was not detected in soil samples collected from deeper native soils (greater than 5 feet bgs) beneath the remote-fill line. Based on the excellent condition of the remote-fill lines at the time of their removal, the differing soil types observed in imported fill during remote-fill removal and sampling activities, and the difference between depths of impacted (shallow) and non-impacted (deep) soils, the low levels of TRPH (up to 232 milligrams per kilogram [mg/kg] or parts per million) detected in soil samples collected from the subsurface beneath the remote-fill line during UST removal activities are believed to be associated with the former use of the property as an auto junk yard, impacted fill imported to the site prior to, or during, construction of the current on-site facilities. Groundwater contamination at the site was detected in two groundwater grab samples collected during site assessment activities in October 2006. Groundwater grab sample T9 contained 2.6 milligrams per liter (mg/l) of TRPH. December 2007, four monitoring wells were installed on site. In January 2008, groundwater samples were collected from the four monitoring wells to further assess groundwater contamination at the site. During monitoring well installation activities, tetrachloroethene (PCE), trichloroethene (TCE) and/or their degradation products were detected in soil samples collected from four monitoring well borings TB1 (MW1), TB2 (MW2), TB3 (MW3) and TB4 (MW4). The highest contaminant concentrations in soil were detected in the most up-gradient boring TB1 [MW1] within an area with the lowest concentrations in groundwater. The lowest contaminant concentrations in soil were detected in the most down-gradient boring TB2 [MW2] within an area with the highest concentrations in groundwater.In March 2010, groundwater monitoring wells MW5, MW6, and MW7 were installed at the site. The groundwater monitoring data indicated other potential contamination sources in the area around down-gradient wells MW6 and MW Offsite

NISSAN NORTH AMERICA, INC. (Continued) **S108418275**

Click here to access the California GeoTracker records for this facility:

O76 **DOMINGUEZ CAR WASH** **LUST** **U001565785**
SSE **20651 AVALON BLVD** **HIST UST** **N/A**
1/4-1/2 **CARSON, CA 90746** **HIST CORTESE**
0.442 mi.
2333 ft. **Site 1 of 4 in cluster O**

Relative:
Lower

Actual:
20 ft.

LUST:

Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603703232
Global Id:	T0603703232
Latitude:	33.844127
Longitude:	-118.263937
Status:	Completed - Case Closed
Status Date:	07/22/1996
Case Worker:	YR
RB Case Number:	I-06566
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0603703232
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603703232
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0603703232
Action Type:	Other
Date:	07/02/1991
Action:	Leak Reported

Global Id:	T0603703232
Action Type:	Other
Date:	06/26/1991
Action:	Leak Discovery

DOMINGUEZ CAR WASH (Continued) **U001565785**

LUST:
Global Id: T0603703232
Status: Open - Case Begin Date
Status Date: 05/15/1991

Global Id: T0603703232
Status: Open - Site Assessment
Status Date: 05/15/1991

Global Id: T0603703232
Status: Open - Site Assessment
Status Date: 06/26/1991

Global Id: T0603703232
Status: Open - Remediation
Status Date: 09/13/1991

Global Id: T0603703232
Status: Completed - Case Closed
Status Date: 07/22/1996

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: I-06566
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: Not reported
Global ID: T0603703232
W Global ID: Not reported
Staff: UNK
Local Agency: 19000
Cross Street: 405 FWY
Enforcement Type: Not reported
Date Leak Discovered: 6/26/1991
Date Leak First Reported: 7/2/1991
Date Leak Record Entered: 8/24/1991
Date Confirmation Began: Not reported
Date Leak Stopped: Not reported
Date Case Last Changed on Database: 11/21/1996
Date the Case was Closed: 7/22/1996
How Leak Discovered: OM
How Leak Stopped: Not reported
Cause of Leak: UNK
Leak Source: UNK
Operator: CHEUNG, DANIEL
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 3902.366851771686117963366 1107
Source of Cleanup Funding: UNK
Preliminary Site Assessment Workplan Submitted: 5/15/1991

DOMINGUEZ CAR WASH (Continued) **U001565785**

Preliminary Site Assessment Began:	6/26/1991
Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	9/13/1991
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	DOMINGUEZ CAR WASH
RP Address:	SAME AS SITE
Program:	LUST
Lat/Long:	33.8437399 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000007807
Facility Type:	Gas Station
Other Type:	CAR WASH
Contact Name:	DANIEL CHEUNG
Telephone:	2133244979
Owner Name:	HCCT INVESTMENT CORP
Owner Address:	20651 S. AVALON BLVD
Owner City,St,Zip:	CARSON, CA 90746
Total Tanks:	0003
Tank Num:	001
Container Num:	3
Year Installed:	1977
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	1
Year Installed:	1977
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

DOMINGUEZ CAR WASH (Continued) **U001565785**

Tank Num: 003
Container Num: 2
Year Installed: 1977
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-06566

O77 **DOMINGUEZ CAR WASH** **LUST** **S101617965**
SSE **20651 S AVALON BLVD** **SWEEPS UST** **N/A**
1/4-1/2 **CARSON, CA 90746** **HIST UST**
0.442 mi. **CA FID UST**
2333 ft. **Site 2 of 4 in cluster O** **LOS ANGELES CO. HMS**

Relative: Lower
Actual: 20 ft.

LUST:
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603706590
Global Id: T0603706590
Latitude: 33.844201
Longitude: -118.264065
Status: Completed - Case Closed
Status Date: 07/15/2016
Case Worker: CET
RB Case Number: I-06566A
Local Agency: LOS ANGELES COUNTY
File Location: Regional Board
Local Case Number: 006348-006566
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0603706590
Contact Type: Regional Board Caseworker
Contact Name: CHANDRA TYLER
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: cetyler@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603706590
Contact Type: Local Agency Caseworker
Contact Name: TIM SMITH
Organization Name: LOS ANGELES COUNTY
Address: 900 S. FREMONT AVE.
City: ALHAMBRA
Email: tsmith@dpw.lacounty.gov
Phone Number: Not reported

DOMINGUEZ CAR WASH (Continued) **S101617965**

LUST:

Global Id:	T0603706590
Action Type:	RESPONSE
Date:	01/15/2010
Action:	Monitoring Report - Semi-Annually
Global Id:	T0603706590
Action Type:	RESPONSE
Date:	01/15/2011
Action:	Correspondence
Global Id:	T0603706590
Action Type:	RESPONSE
Date:	07/15/2010
Action:	Soil and Water Investigation Workplan
Global Id:	T0603706590
Action Type:	RESPONSE
Date:	04/15/2009
Action:	Monitoring Report - Quarterly
Global Id:	T0603706590
Action Type:	Other
Date:	07/03/2003
Action:	Leak Reported
Global Id:	T0603706590
Action Type:	ENFORCEMENT
Date:	07/20/2004
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0603706590
Action Type:	ENFORCEMENT
Date:	06/17/2005
Action:	Staff Letter
Global Id:	T0603706590
Action Type:	ENFORCEMENT
Date:	09/22/2010
Action:	Staff Letter
Global Id:	T0603706590
Action Type:	RESPONSE
Date:	04/15/2008
Action:	Monitoring Report - Quarterly
Global Id:	T0603706590
Action Type:	RESPONSE
Date:	01/15/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0603706590
Action Type:	RESPONSE
Date:	07/16/2015
Action:	Request for Closure - Regulator Responded
Global Id:	T0603706590

DOMINGUEZ CAR WASH (Continued) **S101617965**

Action Type: ENFORCEMENT
Date: 05/26/2015
Action: Health and Safety Code Section 25296.10(c)

Global Id: T0603706590
Action Type: RESPONSE
Date: 07/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0603706590
Action Type: Other
Date: 12/02/1998
Action: Leak Discovery

Global Id: T0603706590
Action Type: RESPONSE
Date: 07/15/2015
Action: Monitoring Report - Semi-Annually

Global Id: T0603706590
Action Type: RESPONSE
Date: 08/17/2005
Action: Other Report / Document

Global Id: T0603706590
Action Type: ENFORCEMENT
Date: 05/13/2010
Action: Staff Letter

Global Id: T0603706590
Action Type: RESPONSE
Date: 09/11/2003
Action: Other Report / Document

Global Id: T0603706590
Action Type: ENFORCEMENT
Date: 07/15/2016
Action: Closure/No Further Action Letter

Global Id: T0603706590
Action Type: RESPONSE
Date: 07/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0603706590
Action Type: RESPONSE
Date: 01/15/2011
Action: Pilot Study/ Treatability Report

Global Id: T0603706590
Action Type: RESPONSE
Date: 08/17/2005
Action: Soil and Water Investigation Report

Global Id: T0603706590
Action Type: RESPONSE
Date: 10/15/2008

DOMINGUEZ CAR WASH (Continued) **S101617965**

Action: Monitoring Report - Quarterly

Global Id: T0603706590
Action Type: RESPONSE
Date: 10/15/2007
Action: Monitoring Report - Quarterly

Global Id: T0603706590
Action Type: RESPONSE
Date: 01/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0603706590
Action Type: RESPONSE
Date: 07/22/2004
Action: Soil and Water Investigation Workplan

Global Id: T0603706590
Action Type: ENFORCEMENT
Date: 09/11/2015
Action: Notification - Preclosure

Global Id: T0603706590
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0603706590
Action Type: RESPONSE
Date: 04/06/2016
Action: Well Destruction Report

Global Id: T0603706590
Action Type: ENFORCEMENT
Date: 08/11/2003
Action: Staff Letter

Global Id: T0603706590
Action Type: RESPONSE
Date: 01/15/2011
Action: Remedial Progress Report

Global Id: T0603706590
Action Type: RESPONSE
Date: 11/23/2010
Action: Site Assessment Report

Global Id: T0603706590
Action Type: RESPONSE
Date: 07/15/2010
Action: Correspondence

Global Id: T0603706590
Action Type: RESPONSE
Date: 01/15/2011
Action: Pilot Study/ Treatability Report

DOMINGUEZ CAR WASH (Continued) **S101617965**

Global Id: T0603706590
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0603706590
Action Type: RESPONSE
Date: 07/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603706590
Action Type: RESPONSE
Date: 08/06/2010
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0603706590
Action Type: RESPONSE
Date: 01/15/2006
Action: Monitoring Report - Quarterly

Global Id: T0603706590
Action Type: RESPONSE
Date: 04/15/2007
Action: Monitoring Report - Quarterly

LUST:
Global Id: T0603706590
Status: Open - Case Begin Date
Status Date: 12/02/1998

Global Id: T0603706590
Status: Open - Site Assessment
Status Date: 07/03/2003

Global Id: T0603706590
Status: Open - Site Assessment
Status Date: 07/22/2004

Global Id: T0603706590
Status: Open - Site Assessment
Status Date: 06/17/2005

Global Id: T0603706590
Status: Open - Assessment & Interim Remedial Action
Status Date: 05/13/2010

Global Id: T0603706590
Status: Open - Assessment & Interim Remedial Action
Status Date: 09/22/2010

Global Id: T0603706590
Status: Open - Eligible for Closure
Status Date: 07/22/2015

Global Id: T0603706590
Status: Completed - Case Closed
Status Date: 07/15/2016

DOMINGUEZ CAR WASH (Continued) **S101617965**

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	I-06566A	
Status:	Pollution Characterization	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	006348-006566	
Case Type:	Undefined	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603706590	
W Global ID:	Not reported	
Staff:	CEC	
Local Agency:	19000	
Cross Street:	DEL AMO BLVD.	
Enforcement Type:	SEL	
Date Leak Discovered:	12/2/1998	
Date Leak First Reported:		7/3/2003
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	7/3/2003	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		Not reported
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	O,	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		Not reported
Source of Cleanup Funding:		O,
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		7/22/2004
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	DANIEL CHEUNG	
RP Address:	20651 S. AVALON BLVD.	
Program:	LUST	
Lat/Long:	0 / 0	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	

DOMINGUEZ CAR WASH (Continued) **S101617965**

Assigned Name: Not reported
Summary: Not reported

SWEEPS UST:
Status: Active
Comp Number: 6566
Number: 9
Board Of Equalization: 44-008104
Referral Date: 02-10-92
Action Date: 02-10-92
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-006566-000001
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: 3

Status: Active
Comp Number: 6566
Number: 9
Board Of Equalization: 44-008104
Referral Date: 02-10-92
Action Date: 02-10-92
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-006566-000002
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 6566
Number: 9
Board Of Equalization: 44-008104
Referral Date: 02-10-92
Action Date: 02-10-92
Created Date: 06-30-89
Owner Tank Id: 3
SWRCB Tank Id: 19-000-006566-000003
Tank Status: A
Capacity: 1
Active Date: 02-10-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

HIST UST:

DOMINGUEZ CAR WASH (Continued) **S101617965**

File Number:	00026D90
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00026D90.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	19003187
Regulated By:	UTNKA
Regulated ID:	00007807
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	3103244979
Mail To:	Not reported
Mailing Address:	20651 S AVALON BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	CARSON 90746
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

LOS ANGELES CO. HMS:

Region:	LA
Permit Category:	I
Facility Id:	006348-I06566
Facility Type:	01
Facility Status:	Closed
Area:	22
Permit Number:	000009940
Permit Status:	Closed
Region:	LA
Permit Category:	I
Facility Id:	006348-058006

DOMINGUEZ CAR WASH (Continued) **S101617965**

Facility Type: 01
Facility Status: Permit
Area: 22
Permit Number: 000758683
Permit Status: Permit

Region: LA
Permit Category: I
Facility Id: 006348-050045
Facility Type: 01
Facility Status: Closed
Area: 22
Permit Number: 000574831
Permit Status: Closed

Region: LA
Permit Category: Not reported
Facility Id: 006348-046043
Facility Type: Not reported
Facility Status: OPEN
Area: 22
Permit Number: Not reported
Permit Status: Not reported

Region: LA
Permit Category: T
Facility Id: 006348-006566
Facility Type: 0
Facility Status: Removed
Area: 22
Permit Number: 00001888T
Permit Status: Removed

78
West
1/4-1/2
0.450 mi.
2378 ft.

NORTH CARSON AREA SITE DISCOVERY PROJECT **ENVIROSTOR** **S118757287**
VICINITY OF I-405 FREEWAY AND MAIN STREET **N/A**
CARSON, CA 90745

Relative:
Higher

Actual:
41 ft.

ENVIROSTOR:
Facility ID: 60002068
Status: No Action Required
Status Date: 08/11/2015
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 275
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: EPA - PASI
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED

NORTH CARSON AREA SITE DISCOVERY PROJECT (Continued) **S118757287**

Funding: EPA Grant
Latitude: 33.85256
Longitude: -118.2802
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 60002068
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Discovery
Completed Date: 09/05/2014
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

P79 **DON DOMINGUEZ APARTMENT DEMOLITION** **SWF/LF** **S111075888**
WSW **19822 MAIN ST** **NPDES** **N/A**
1/4-1/2 **CARSON, CA 90745** **CIWQS**
0.452 mi.
2388 ft. **Site 1 of 2 in cluster P**

Relative:
Higher

Actual:
31 ft.

LOS ANGELES CO. LF:
Site ID: 2251
Alt. Address: Not reported
Site Contact: Not reported
Site Contact Phone: Not reported
Site Email: Not reported
Site Website: Not reported
Site Type: Designated Waste Landfill
Site SWIS Number: 19-AQ-5000
Beginning Operation Date: Not reported
Ending Operation Date: Not reported
Local Enforcement Agency: Not reported
Maximun Depth Fill(Ft): Not reported
Permitted Capacity: Not reported
Present Use: Residential
Remaining Capacity(Million): Not reported
Status: Closed
Waste Accepted: Not reported
Hours of Operation: Not reported
Disposal Area (Acre): Not reported

Detail As Of 01/2014:
Operator Name: Mid-Wilshire Management & Investment, Co.
Operator Address: 3670 Wilshire Boulevard
Operator City/State/Zip: LOS ANGELES, CA 90010

DON DOMINGUEZ APARTMENT DEMOLITION (Continued) **S111075888**

Operator Contact:	Abe Oheb
Operator Telephone:	(213) 382-3433
Operator Email:	Not reported
Owner Name:	Don Dominguez Apartments, INC.
Owner Address:	827 Moraga
Owner City/State/Zip:	Bel Aire, CA 90049
Owner Contact:	Robert Friedman
Owner Telephone:	Not reported
Owner Email:	Not reported

NPDES:

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	422159
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C362986
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	11/16/2012
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	02/09/2012
PROCESSED DATE:	02/09/2012
STATUS CODE NAME:	Terminated
STATUS DATE:	03/15/2013
PLACE SIZE:	4.63
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Christopher Trujillo
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	310-952-6432
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	ctrujillo@watsonlandcompany.com
OPERATOR NAME:	Watson Land Company
OPERATOR ADDRESS:	22010 Wilmington Avenue
OPERATOR CITY:	Carson
OPERATOR STATE:	California
OPERATOR ZIP:	90745
OPERATOR CONTACT NAME:	Christopher Trujillo
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	310-952-6432
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	ctrujillo@watsonlandcompany.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Watson Land Company
DEVELOPER ADDRESS:	22010 Wilmington Avenue
DEVELOPER CITY:	Carson
DEVELOPER STATE:	California
DEVELOPER ZIP:	90745

DON DOMINGUEZ APARTMENT DEMOLITION (Continued) **S111075888**

DEVELOPER CONTACT NAME:	Christopher Trujillo
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Demolition
CONSTYPE OTHER IND:	Y
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Dominguez Channel
CERTIFIER NAME:	Christopher Trujillo
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	09-FEB-12
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

CIWQS:

Agency:	Watson Land Company
Agency Address:	22010 Wilmington Avenue, Carson, CA 90745
Place/Project Type:	Construction - Other: Demolition
SIC/NAICS:	Not reported
Region:	4
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	4 19C362986
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	02/09/2012
Termination Date:	11/16/2012
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.85145
Longitude:	-118.27967

Q80 **LA CO SANITATION DIST 1, LF #1 & #3** **SWF/LF** **S106900227**
WNW **18900 S. MONETA AVE** **N/A**
1/4-1/2 **CARSON, CA**
0.453 mi.
2393 ft. **Site 1 of 3 in cluster Q**

Relative:
Lower

Actual:
6 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AQ-0019
Lat/Long:	33.8571 / -118.2804
Owner Name:	L.A. County Metroplitan Transportation
Owner Telephone:	2139726000
Owner Address:	Not reported
Owner Address2:	425 S. Main St
Owner City,St,Zip:	Los Angeles, CA 900013
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Residential,Commercial
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Annual
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	$0.00
SWIS Num:	19-AQ-0019
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported
Lat/Long:	33.8571 / -118.2804

Region:	STATE
Facility ID:	19-AQ-0019
Lat/Long:	33.8571 / -118.2804
Owner Name:	Metal Associates Inc.
Owner Telephone:	2139726000
Owner Address:	Not reported
Owner Address2:	19204 S. Figueroa St
Owner City,St,Zip:	Carson, CA
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported

LA CO SANITATION DIST 1, LF #1 & #3 (Continued) **S106900227**

Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Residential,Commercial
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Annual
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	$0.00
SWIS Num:	19-AQ-0019
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported
Lat/Long:	33.8571 / -118.2804

R81 **COLDWELL BANKER** **CPS-SLIC** **S106843124**
WNW **19204 S. FIGUEROA ST** **N/A**
1/4-1/2 **CARSON, CA 90745**
0.458 mi.
2416 ft. **Site 1 of 3 in cluster R**

Relative: **Lower**

Actual: **22 ft.**

CPS-SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	06/16/1965
Global Id:	SLT4302119
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	33.856298
Longitude:	-118.280736
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	0036
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

O82 **FIRESTONE TIRE CO** **LUST** **S111711287**
SSE **20707 AVALON BLVD S** **N/A**
1/4-1/2 **CARSON, CA 90746**
0.482 mi.
2547 ft. **Site 3 of 4 in cluster O**

Relative:
Lower

Actual:
20 ft.

LUST:

Lead Agency:	LOS ANGELES COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603703051
Global Id:	T0603703051
Latitude:	33.8432229
Longitude:	-118.2632912
Status:	Completed - Case Closed
Status Date:	01/30/1992
Case Worker:	JOA
RB Case Number:	I-05219
Local Agency:	LOS ANGELES COUNTY
File Location:	Not reported
Local Case Number:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

LUST:

Global Id:	T0603703051
Contact Type:	Local Agency Caseworker
Contact Name:	JOHN AWUJO
Organization Name:	LOS ANGELES COUNTY
Address:	900 S FREMONT AVE
City:	ALHAMBRA
Email:	jawujo@dpw.lacounty.gov
Phone Number:	6264583507

Global Id:	T0603703051
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0603703051
Action Type:	Other
Date:	12/06/1990
Action:	Leak Discovery

Global Id:	T0603703051
Action Type:	Other
Date:	12/06/1990
Action:	Leak Stopped

Global Id:	T0603703051
Action Type:	Other
Date:	12/27/1990
Action:	Leak Reported

FIRESTONE TIRE CO (Continued) **S111711287**

LUST:
Global Id: T0603703051
Status: Open - Case Begin Date
Status Date: 12/06/1990

Global Id: T0603703051
Status: Open - Remediation
Status Date: 09/12/1991

Global Id: T0603703051
Status: Completed - Case Closed
Status Date: 01/30/1992

O83 **FIRESTONE TIRE CO** **HIST CORTESE** **S110060662**
SSE **20707 AVALON** **N/A**
1/4-1/2 **CARSON, CA 90746**
0.482 mi.
2547 ft. **Site 4 of 4 in cluster O**

Relative:
Lower

Actual:
20 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-05219

P84 **DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY** **ENVIROSTOR** **S101295807**
WSW **19800 S. MAIN STREET** **LUST** **N/A**
1/4-1/2 **CARSON, CA 90745** **VCP**
0.485 mi. **HAZNET**
2559 ft. **Site 2 of 2 in cluster P** **HIST CORTESE**
LOS ANGELES CO. HMS

Relative:
Higher

Actual:
32 ft.

ENVIROSTOR:
Facility ID: 60000597
Status: Active
Status Date: 10/10/2006
Site Code: 401640
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 81.1
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Daniel Zogaib
Supervisor: Emad Yemut
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 64
Senate: 35
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 33.84899
Longitude: -118.2771
APN: 7336-009-006, 7336-009-008, 7336-009-009, 7336009006, 7336009008,

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

7336009009
Past Use: LDF, LANDFILL - DOMESTIC
Potential COC: Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Methane Polychlorinated biphenyls (PCBs Tetrachloroethylene (PCE TPH-diesel TPH-gas TPH-JET FUEL TPH-MOTOR OIL 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride
Confirmed COC: Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Methane Tetrachloroethylene (PCE TPH-diesel TPH-gas 1,1,1-Trichloroethane (TCA TPH-JET FUEL TPH-MOTOR OIL Trichloroethylene (TCE Vinyl chloride 30018-NO
Potential Description: OTH, SOIL, SV, OTH, SOIL, SV
Alias Name: Porsche Experience Center Los Angeles
Alias Type: Alternate Name
Alias Name: 7336-009-006
Alias Type: APN
Alias Name: 7336-009-008
Alias Type: APN
Alias Name: 7336-009-009
Alias Type: APN
Alias Name: 7336009006
Alias Type: APN
Alias Name: 7336009008
Alias Type: APN
Alias Name: 7336009009
Alias Type: APN
Alias Name: 110033617682
Alias Type: EPA (FRS #)
Alias Name: 401324
Alias Type: Project Code (Site Code)
Alias Name: 401640
Alias Type: Project Code (Site Code)
Alias Name: 60000597
Alias Type: Envirostor ID Number
Alias Name: http://www.porsche.com/losangeles/experience/
Alias Type: External Website Link / URL

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 10/27/2011
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/02/2015
Comments: FY 1516 Annual Oversight Cost Estimate.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/26/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 12/12/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 11/21/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/29/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 06/19/2013
Comments: Executed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 03/05/2014
Comments: Executed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 10/28/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/08/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 10/10/2006
Comments: Reimbursement Agreement with the Hopkins Real Estate Group was fully executed on 10/10/2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/21/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 06/20/2007
Comments: First wk of a three week sampling event, CPT, hydropunch wk of

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

6/18/07-6/21/07, soil and soil gas wk of 6/25/07-6/27/07

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 04/27/2010
Comments: We had already conditionally approved the WP and were just waiting to get the revised document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 01/10/2011
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/03/2011
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 11/26/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/29/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 12/01/2011
Comments: We advised the responsible party that the probe spacing was AQMD's call.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/13/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/19/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/06/2012
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 02/25/2013
Comments: Conditionally Approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/28/2013
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/03/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/28/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/12/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/10/2013
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/26/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/05/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/18/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 03/27/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 06/04/2013
Comments: Reduced

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/13/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/29/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 07/30/2013
Comments: Approved by South Coast Air Quality Management District

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 04/27/2017
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/08/2014
Comments: Conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 05/01/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/08/2014
Comments: Conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/25/2014
Comments: Approved

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 05/11/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/07/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/14/2014
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/28/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/11/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 08/18/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/25/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/01/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/08/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/29/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/06/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/13/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/20/2014
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2014
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/10/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/17/2014
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/24/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/16/2014
Comments: Completed. No letter necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2014
Comments: Complete..

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 01/06/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/20/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/18/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/19/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/24/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/03/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/23/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 05/21/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/29/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/18/2015
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/24/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/02/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/08/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/15/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/29/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/19/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/02/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/09/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/23/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 10/01/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/07/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/14/2015
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/21/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/18/2015
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/25/2015
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/02/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/16/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 09/16/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/17/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 10/17/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/28/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 09/19/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 11/14/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 06/19/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/24/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/14/2015
Comments: Accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/26/2015
Comments: Accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/25/2015
Comments: Accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 07/30/2015
Comments: Accepted based on opinion of Electrical Engineer of Record and Code Authority.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2013
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/2013
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/31/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/28/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 04/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2014
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/31/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/09/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/11/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 11/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/17/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/20/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/19/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/10/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2016
Comments: Completed. AAM was discontinued after 5/14/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 07/31/2015
Comments: Reviewed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2016
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/13/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/20/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Prospective Purchaser Agreement
Completed Date: 11/18/2016
Comments: Fully Executed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/17/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/03/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 03/09/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/16/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/23/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/30/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/06/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/13/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/20/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/27/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/04/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/11/2016
Comments: complete

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/18/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/25/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/02/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/08/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/15/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/22/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/29/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/06/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/13/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 07/22/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 04/13/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/13/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/13/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 09/15/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 04/27/2017
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 04/27/2017
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/24/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/25/2017
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 03/27/2017
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 03/02/2017
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/16/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 08/14/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/16/2018
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/15/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consultative Service Agreement
Completed Date: 07/07/2010
Comments: Amendement #5 fully executed. The amendment extends the term of the agreement to 10/31/2011 and amends the total maximum amount of the agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/11/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/06/2014
Comments: Completed

Completed Area Name: PROJECT WIDE

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/15/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/24/2016
Comments: Completed and sent.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Remedy Constructed: Operating Properly & Successfully
Future Due Date: 2018
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Operations and Maintenance Plan
Schedule Due Date: 10/02/2017
Schedule Revised Date: 02/15/2018
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Land Use Restriction
Schedule Due Date: 02/24/2018
Schedule Revised Date: 06/04/2018

LUST:
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603704401
Global Id: T0603704401
Latitude: 33.852341
Longitude: -118.2803457
Status: Completed - Case Closed
Status Date: 02/27/1998
Case Worker: JP
RB Case Number: I-16281
Local Agency: LOS ANGELES COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0603704401
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Global Id: T0603704401
Contact Type: Regional Board Caseworker
Contact Name: JOSE PEREYRA
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0603704401
Action Type: Other
Date: 01/19/1994
Action: Leak Reported

Global Id: T0603704401
Action Type: Other
Date: 01/10/1994
Action: Leak Stopped

Global Id: T0603704401
Action Type: ENFORCEMENT
Date: 09/04/1997
Action: * Historical Enforcement

Global Id: T0603704401
Action Type: Other
Date: 01/10/1994
Action: Leak Discovery

LUST:
Global Id: T0603704401
Status: Open - Case Begin Date
Status Date: 01/10/1994

Global Id: T0603704401
Status: Open - Site Assessment
Status Date: 01/10/1994

Global Id: T0603704401
Status: Open - Site Assessment
Status Date: 07/19/1994

Global Id: T0603704401
Status: Open - Site Assessment
Status Date: 11/07/1997

Global Id: T0603704401
Status: Completed - Case Closed
Status Date: 02/27/1998

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Facility Id:	I-16281	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Groundwater	
Abatement Method Used at the Site:		Excavate and Dispose
Global ID:	T0603704401	
W Global ID:	Not reported	
Staff:	JP	
Local Agency:	19000	
Cross Street:	Not reported	
Enforcement Type:	EF	
Date Leak Discovered:	1/10/1994	
Date Leak First Reported:		1/19/1994
Date Leak Record Entered:	2/11/1994	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	1/10/1994	
Date Case Last Changed on Database:		1/22/1998
Date the Case was Closed:		2/27/1998
How Leak Discovered:	Tank Closure	
How Leak Stopped:	Not reported	
Cause of Leak:	Corrosion	
Leak Source:	Tank	
Operator:	A.G.C. DOMINGUEZ HILLS GOLF	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		7706.76239218226280338865810 54
Source of Cleanup Funding:		Tank
Preliminary Site Assessment Workplan Submitted:		1/10/1994
Preliminary Site Assessment Began:		7/19/1994
Pollution Characterization Began:		11/7/1997
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		9/4/1997
Historical Max MTBE Date:		1/1/1965
Hist Max MTBE Conc in Groundwater:		1500
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Yes
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	AMERICAN GOLF CORPORATION	
RP Address:	1633 26TH ST., SANTA MONICA, CA 90404	
Program:	LUST	
Lat/Long:	33.8511925 / -1	
Local Agency Staff:	Not reported	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	11/07/97 WP FOR ADD'L PHASE II ENVIRON. ADD'L PHASE II ENVIRON. SITE ASSESSMENT	01/22/98

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

VCP:

Facility ID:	60000597
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	81.1
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Daniel Zogaib
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	401640
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	10/10/2006
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	33.84899 / -118.2771
APN:	7336-009-006, 7336-009-008, 7336-009-009, 7336009006, 7336009008, 7336009009
Past Use:	LDF, LANDFILL - DOMESTIC
Potential COC:	30001, 30003, 30005, 30015, 30018, 30022, 30024, 30025, 3002501, 3002502, 30026, 30027, 30028
Confirmed COC:	30001,30003,30005,30015,30022,30024,30025,30026,3002501,3002502,30027, 30028,30018-NO
Potential Description:	OTH, SOIL, SV, OTH, SOIL, SV
Alias Name:	Porsche Experience Center Los Angeles
Alias Type:	Alternate Name
Alias Name:	7336-009-006
Alias Type:	APN
Alias Name:	7336-009-008
Alias Type:	APN
Alias Name:	7336-009-009
Alias Type:	APN
Alias Name:	7336009006
Alias Type:	APN
Alias Name:	7336009008
Alias Type:	APN
Alias Name:	7336009009
Alias Type:	APN
Alias Name:	110033617682
Alias Type:	EPA (FRS #)
Alias Name:	401324
Alias Type:	Project Code (Site Code)
Alias Name:	401640
Alias Type:	Project Code (Site Code)
Alias Name:	60000597
Alias Type:	Envirostor ID Number
Alias Name:	http://www.porsche.com/losangeles/experience/
Alias Type:	External Website Link / URL

Completed Info:

Completed Area Name:	PROJECT WIDE

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 10/27/2011
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/02/2015
Comments: FY 1516 Annual Oversight Cost Estimate.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/26/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 12/12/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 11/21/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/29/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 06/19/2013
Comments: Executed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 03/05/2014
Comments: Executed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 10/28/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/08/2013

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 10/10/2006
Comments: Reimbursement Agreement with the Hopkins Real Estate Group was fully executed on 10/10/2006.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/21/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 06/20/2007
Comments: First wk of a three week sampling event, CPT, hydropunch wk of 6/18/07-6/21/07, soil and soil gas wk of 6/25/07-6/27/07

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 04/27/2010
Comments: We had already conditionally approved the WP and were just waiting to get the revised document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 01/10/2011
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/03/2011
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 11/26/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/29/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 12/01/2011

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Comments: We advised the responsible party that the probe spacing was AQMD's call.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/13/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/19/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 02/06/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 02/25/2013
Comments: Conditionally Approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/28/2013
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/03/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/28/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/12/2012
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 01/10/2013
Comments: Approved

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/26/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/05/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/18/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/27/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 06/04/2013
Comments: Reduced

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/13/2013
Comments: Conditionally approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 08/29/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 07/30/2013
Comments: Approved by South Coast Air Quality Management District

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 04/27/2017
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 05/08/2014
Comments: Conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 05/01/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/08/2014
Comments: Conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/25/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 05/11/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/07/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/14/2014
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2014
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/28/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/11/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/18/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/25/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/01/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/08/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 09/29/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/06/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/13/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/20/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2014
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/10/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/17/2014
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/24/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2014
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/16/2014
Comments: Completed. No letter necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2014
Comments: Complete..

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/20/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 02/18/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/19/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/24/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/03/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/23/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/21/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/29/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/18/2015
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/24/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 07/02/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/08/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/15/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/29/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/19/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/02/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/09/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/23/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/01/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/07/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/14/2015
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/21/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 11/12/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/18/2015
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/25/2015
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/02/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/16/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 09/16/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/17/2014
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 10/17/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/28/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 09/19/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/14/2014
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 06/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 06/19/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/24/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/14/2015
Comments: Accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/26/2015
Comments: Accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 08/25/2015
Comments: Accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 07/30/2015
Comments: Accepted based on opinion of Electrical Engineer of Record and Code Authority.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/2013
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2013
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/31/2013
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/28/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2014
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 10/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/31/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/30/2015
Comments: Completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/09/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/11/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/10/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/17/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/20/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/19/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 08/10/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2016
Comments: Completed. AAM was discontinued after 5/14/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 07/31/2015
Comments: Reviewed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/13/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/20/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/27/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Prospective Purchaser Agreement
Completed Date: 11/18/2016
Comments: Fully Executed.

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/17/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/03/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/09/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/16/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/23/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/30/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/06/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/13/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 04/20/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/27/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/04/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/11/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/18/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/25/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/02/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/08/2016
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/15/2016
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/22/2016
Comments: completed

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/29/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/06/2016
Comments: complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/13/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/22/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 04/13/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/13/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/13/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 09/15/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 04/27/2017
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Date: 04/27/2017
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/24/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/25/2017
Comments: Completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 03/27/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 03/02/2017
Comments: completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/16/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 08/14/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/16/2018
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/15/2016
Comments: Not reported

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consultative Service Agreement
Completed Date: 07/07/2010
Comments: Amendement #5 fully executed. The amendment extends the term of the agreement to 10/31/2011 and amends the total maximum amount of the agreement.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/11/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/06/2014
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/15/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/24/2016
Comments: Completed and sent.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Remedy Constructed: Operating Properly & Successfully
Future Due Date: 2018
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Operations and Maintenance Plan
Schedule Due Date: 10/02/2017
Schedule Revised Date: 02/15/2018
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Land Use Restriction
Schedule Due Date: 02/24/2018
Schedule Revised Date: 06/04/2018

HAZNET:
envid: S101295807
Year: 2016
GEPAID: CAC002870442
Contact: BRAD FRAZIER
Telephone: 3109526410

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Mailing Name: Not reported
Mailing Address: 22010 WILMINGTON AVE
Mailing City,St,Zip: CARSON, CA 907454306
Gen County: Los Angeles
TSD EPA ID: CAD980675276
TSD County: Kern
Waste Category: Contaminated soil from site clean-up
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 45.12
Cat Decode: Contaminated soil from site clean-up
Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County: Los Angeles

envid: S101295807
Year: 2013
GEPAID: CAC002745805
Contact: BRETT COCHRUM
Telephone: 7142356401
Mailing Name: Not reported
Mailing Address: 22010 WILMINGTON AVE.
Mailing City,St,Zip: CARSON, CA 90745
Gen County: Los Angeles
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.63
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-16281

LOS ANGELES CO. HMS:
Region: LA
Permit Category: T
Facility Id: 015207-016281
Facility Type: 1
Facility Status: Removed
Area: 22
Permit Number: 000075550
Permit Status: Removed

Region: LA
Permit Category: I
Facility Id: 033828-057916
Facility Type: 01
Facility Status: Permit
Area: 22

DOMINGUEZ GOLF COURSE & ADJACENT PROPERTY (Continued) **S101295807**

Permit Number: 000802047
Permit Status: Permit

Region: LA
Permit Category: I
Facility Id: 033828-057916
Facility Type: S4
Facility Status: Permit
Area: 22
Permit Number: 000804493
Permit Status: Permit

R85
West
1/4-1/2
0.485 mi.
2561 ft.

Relative:
Lower

Actual:
25 ft.

SALCO
19204 S FIGUEROA
CARSON, CA 90749

Site 2 of 3 in cluster R

RCRA-SQG **1000174701**
SWF/LF **CAD982030447**
LUST
EMI
ENF
HIST CORTESE
LA Co. Site Mitigation
WDS

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SALCO
Facility address: 19204 S FIGUEROA
CARSON, CA 90749
EPA ID: CAD982030447
Mailing address: PO BOX 4527
CARSON, CA 90749
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: ROBERT WOOLFSON
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

SALCO (Continued) **1000174701**

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/30/1990
Site name: SALCO
Classification: Large Quantity Generator

Date form received by agency: 08/10/1987
Site name: SALCO
Classification: Large Quantity Generator

Violation Status: No violations found

LOS ANGELES CO. LF:
Site ID: 2484
Alt. Address: 18900 South Figueroa Street, Carson; 450 Griffith Ave, Gardena
Site Contact: Not reported
Site Contact Phone: Not reported
Site Email: Not reported
Site Website: Not reported
Site Type: Designated Waste Landfill
Site SWIS Number: 19-AQ-0019
Beginning Operation Date: Not reported
Ending Operation Date: Jul-61
Local Enforcement Agency: Not reported
Maximun Depth Fill(Ft): 14
Permitted Capacity: Not reported
Present Use: Not reported
Remaining Capacity(Million): Not reported

SALCO (Continued) **1000174701**

Status: Closed
Waste Accepted: Not reported
Hours of Operation: Not reported
Disposal Area (Acre): 3.1

Detail As Of 01/2014:
Operator Name: Multiple Operators (See Notes)
Operator Address: Not reported
Operator City/State/Zip: Not reported
Operator Contact: Not reported
Operator Telephone: Not reported
Operator Email: Not reported
Owner Name: Metal Associates, Inc.
Owner Address: 19204 SOUTH FIGUEROA STREET
Owner City/State/Zip: CARSON, CA 90248
Owner Contact: Not reported
Owner Telephone: (213) 972-6000
Owner Email: Not reported

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: I-01463
Status: Case Closed
Substance: Diesel
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Groundwater
Abatement Method Used at the Site: Remove Free Product
Global ID: T0603702784
W Global ID: Not reported
Staff: JLC
Local Agency: 19000
Cross Street: ANELO
Enforcement Type: Not reported
Date Leak Discovered: 2/14/1991
Date Leak First Reported: 5/20/1991
Date Leak Record Entered: 5/22/1991
Date Confirmation Began: Not reported
Date Leak Stopped: 2/14/1991
Date Case Last Changed on Database: 8/11/2000
Date the Case was Closed: 6/22/2000
How Leak Discovered: Tank Closure
How Leak Stopped: Not reported
Cause of Leak: UNK
Leak Source: UNK
Operator: MCKNIGHT, W.A.
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 9240.77540029819822634383437
Source of Cleanup Funding: UNK
Preliminary Site Assessment Workplan Submitted: Not reported
Preliminary Site Assessment Began: 5/20/1991
Pollution Characterization Began: 8/2/1995
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported

SALCO (Continued) **1000174701**

Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	1/1/1965
Hist Max MTBE Conc in Groundwater:	35
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	<
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	SALCO
RP Address:	P.O. BOX 341648, LOS ANGELES, CA 90034-1648
Program:	LUST
Lat/Long:	33.8562534 / -1
Local Agency Staff:	Not reported
Beneficial Use:	Not reported
Priority:	LOP/HIGH - ADMINISTRATIVE (CLOSURE/SB2004/ENFORCEMENT)
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	2,700 METER TO SE TO DOMESTIC WELL 8858FT; 11/15/99 4TH QTR GW SAMPLING RPT; 5/17/00 1ST QTR GW MON RPT 2000; 8/11/00 WELL ABANDONMENT RPT

EMI:

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	56861
Air District Name:	SC
SIC Code:	3341
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	4
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	2
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

ENF:

Region:	4
Facility Id:	255076
Agency Name:	Salco
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Not reported
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported

SALCO (Continued) **1000174701**

SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	UST
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	I-01463
Reg Measure Id:	168384
Reg Measure Type:	Unregulated
Region:	4
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	229183
Region:	4
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	08/13/1999
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported

SALCO (Continued) **1000174701**

Termination Date:	08/13/1999
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - I-01463
Description:	Level 1 enforcement letter sent 8/13/99 for FTS 3 groundwater monitoring reports.
Program:	UST
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	I-01463

LA Co. Site Mitigation:

Facility ID:	FA0010359
Status:	Not reported
Site ID:	SD0011654
Jurisdiction:	Not reported
Case ID:	RO0011654
Abated:	Yes
Assigned To:	Not reported
Entered Date:	Not reported
Abated Date:	09/19/1989

WDS:

Facility ID:	4 19I014774
Facility Type:	Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	4
Facility Telephone:	3103276362
Facility Contact:	Robert Ibanez
Agency Name:	QUALITY PAPER FIBERS INC.
Agency Address:	Not reported
Agency City,St,Zip:	0
Agency Contact:	Not reported
Agency Telephone:	Not reported
Agency Type:	Private
SIC Code:	5093
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported

SALCO (Continued) **1000174701**

Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	The facility is not a POTW.
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

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86 **KATZ DUMP** **SWF/LF** **S109821594**
NW **BROADWAY & VICTORIA SOUTHWEST CORNER** **N/A**
1/4-1/2 **CARSON, CA**
0.493 mi.
2602 ft.

Relative: **Lower**

Actual: **23 ft.**

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AQ-5057
Lat/Long:	33.86111 / -118.27778
Owner Name:	Not reported
Owner Telephone:	Not reported
Owner Address:	Not reported
Owner Address2:	Not reported
Owner City,St,Zip:	Not reported
Operational Status:	Not reported
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	Not reported
Activity:	Not reported
Regulation Status:	Not reported
Landuse Name:	Residential,Commercial
GIS Source:	Map
Category:	Not reported
Unit Number:	Not reported
Inspection Frequency:	Not reported
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	Not reported
SWIS Num:	19-AQ-5057

KATZ DUMP (Continued) **S109821594**

Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: Not reported
Actual Throughput with Units: Not reported
Permitted Capacity with Units: Not reported
Remaining Capacity: Not reported
Remaining Capacity with Units: Not reported
Lat/Long: 33.86111 / -118.27778

Q87 **MARY ANN KAY** **SWF/LF** **S113170554**
WNW **19130 S FIGUEROA ST** **HAZNET** **N/A**
1/4-1/2 **CARSON, CA 90248**
0.496 mi.
2620 ft. **Site 2 of 3 in cluster Q**

Relative:
Lower

Actual:
25 ft.

SWF/LF (SWIS):
Region: STATE
Facility ID: 19-AQ-5037
Lat/Long: 34.42824 / -118.4698
Owner Name: Bell Movers
Owner Telephone: 3105328651
Owner Address: Not reported
Owner Address2: 19130 S. Figueroa
Owner City,St,Zip: Carson, CA 90744
Operational Status: Clean Closed
Operator: Not reported
Operator Phone: Not reported
Operator Address: Not reported
Operator Address2: Not reported
Operator City,St,Zip: Not reported
Permit Date: Not reported
Permit Status: Not reported
Permitted Acreage: $3.00
Activity: Solid Waste Disposal Site
Regulation Status: Unpermitted
Landuse Name: Residential,Industrial,Commercial
GIS Source: External
Category: Disposal
Unit Number: 01
Inspection Frequency: Quarterly
Accepted Waste: Inert,Mixed municipal,Other hazardous
Closure Date: 06/01/1968
Closure Type: Estimated
Disposal Acreage: $1.00
SWIS Num: 19-AQ-5037
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: Not reported
Actual Throughput with Units: Not reported
Permitted Capacity with Units: Not reported
Remaining Capacity: Not reported
Remaining Capacity with Units: Not reported
Lat/Long: 34.42824 / -118.4698

HAZNET:
envid: S113170554
Year: 1999

MARY ANN KAY (Continued) **S113170554**

GEPAID:	CAP000058594
Contact:	MARY ANN KAY
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	19130 S Figueroa St
Mailing City,St,Zip:	CARSON, CA 902480000
Gen County:	Not reported
TSD EPA ID:	CAT000646117
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Treatment, Tank
Tons:	219.1280
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

envid:	S113170554
Year:	1999
GEPAID:	CAP000058594
Contact:	MARY ANN KAY
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	19130 S Figueroa St
Mailing City,St,Zip:	CARSON, CA 902480000
Gen County:	Not reported
TSD EPA ID:	CAT000646117
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Not reported
Tons:	15.1704
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

envid:	S113170554
Year:	1999
GEPAID:	CAP000058594
Contact:	MARY ANN KAY
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	19130 S Figueroa St
Mailing City,St,Zip:	CARSON, CA 902480000
Gen County:	Not reported
TSD EPA ID:	CAT000646117
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Not reported
Tons:	30.3408
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Los Angeles

Q88 **GATEWAY BUSINESS PROPERTIES** **CPS-SLIC** **S109690182**
WNW **19130 S FIGUEROA ST** **ENF** **N/A**
1/4-1/2 **CARSON, CA 90248** **LOS ANGELES CO. HMS**
0.496 mi.
2620 ft. **Site 3 of 3 in cluster Q**

Relative:
Lower

Actual:
25 ft.

CPS-SLIC:

Region:	STATE
Facility Status:	**Open - Inactive**
Status Date:	01/29/2015
Global Id:	SL204BM2356
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	33.858638
Longitude:	-118.28072
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	0942
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

ENF:

Region:	4
Facility Id:	814434
Agency Name:	L. A. Deli Distributors, Inc.
Place Type:	Service/Commercial
Place Subtype:	Service/Commercial Site, NEC
Facility Type:	Municipal/Domestic
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	33.86178
Place Longitude:	-118.28214
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	2.50000000
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported

GATEWAY BUSINESS PROPERTIES (Continued) **S109690182**

Program:	WDRNONMUNIPRCS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	4B197000210
Reg Measure Id:	400571
Reg Measure Type:	Enrollee - WDR
Region:	4
Order #:	01-031
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	2088
Status:	Active
Status Date:	02/26/2016
Effective Date:	02/24/2016
Expiration/Review Date:	02/24/2026
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	416362
Region:	4
Order / Resolution Number:	NOV
Enforcement Action Type:	Notice of Violation
Effective Date:	09/15/2017
Adoption/Issuance Date:	09/15/2017
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	NOV 09/15/2017 for L. A. Deli Distributors, Inc.
Description:	NOV issued for Failure to Submit Monitoring Reports
Program:	WDRNONMUNIPRCS
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

LOS ANGELES CO. HMS:
Region: LA

GATEWAY BUSINESS PROPERTIES (Continued) **S109690182**

Permit Category: I
Facility Id: 032514-052276
Facility Type: S4
Facility Status: Removed
Area: 22
Permit Number: 000594011
Permit Status: Removed

R89 **SALCO** **LUST** **S111711279**
West **19204 FIGUEROA ST S** **N/A**
1/4-1/2 **CARSON, CA 90749**
0.500 mi.
2638 ft. **Site 3 of 3 in cluster R**

Relative: **Lower**
Actual: **26 ft.**

LUST:
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603702784
Global Id: T0603702784
Latitude: 33.855717
Longitude: -118.280454
Status: Completed - Case Closed
Status Date: 06/22/2000
Case Worker: Not reported
RB Case Number: I-01463
Local Agency: LOS ANGELES COUNTY
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0603702784
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

LUST:
Global Id: T0603702784
Action Type: Other
Date: 02/14/1991
Action: Leak Stopped

Global Id: T0603702784
Action Type: Other
Date: 05/20/1991
Action: Leak Reported

Global Id: T0603702784
Action Type: Other
Date: 02/14/1991
Action: Leak Discovery

SALCO (Continued) **S111711279**

LUST:

Global Id:	T0603702784
Status:	Open - Case Begin Date
Status Date:	02/14/1991
Global Id:	T0603702784
Status:	Open - Site Assessment
Status Date:	05/20/1991
Global Id:	T0603702784
Status:	Open - Site Assessment
Status Date:	08/02/1995
Global Id:	T0603702784
Status:	Completed - Case Closed
Status Date:	06/22/2000

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90 WNW 1/2-1 0.524 mi. 2767 ft. **CARROLL SHELBY ENTERPRISES FACILITY** **ENVIROSTOR S103955020**
19021 SOUTH FIGUEROA STREET **VCP N/A**
GARDENA, CA 90248

Relative: Higher

Actual: 27 ft.

ENVIROSTOR:

Facility ID:	60001060
Status:	Active
Status Date:	02/09/2009
Site Code:	401476
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	3.43
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Johnson Abraham
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.85818
Longitude:	-118.2817
APN:	7339-009-005, 7339-009-006
Past Use:	ENGINE TESTING/REPAIR, FOUNDRY, MANUFACTURING - METAL, OFFICE BUILDING, UNDERGROUND STORAGE TANKS
Potential COC:	Benzene Tetrachloroethylene (PCE TPH-diesel TPH-gas 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE 1,4-Dichlorobenzene 1,2-Dichloroethane (EDC 1,1-Dichloroethylene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane
Confirmed COC:	Benzene 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane Tetrachloroethylene (PCE TPH-diesel TPH-gas 1,1,1-Trichloroethane (TCA 30193-NO 1,1,1,2-Tetrachloroethane 1,4-Dichlorobenzene

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Trichloroethylene (TCE 30194-NO
Potential Description: OTH, SOIL, SV
Alias Name: Atlantic Auto & Truck Sales/Classic Cars
Alias Type: Alternate Name
Alias Name: Atlantic Auto & Truck Wrecking
Alias Type: Alternate Name
Alias Name: CHST
Alias Type: Alternate Name
Alias Name: Carroll Hall Shelby Trust
Alias Type: Alternate Name
Alias Name: Carroll Hall Shelby Trust U/D/T
Alias Type: Alternate Name
Alias Name: 7339-009-005
Alias Type: APN
Alias Name: 7339-009-006
Alias Type: APN
Alias Name: 401476
Alias Type: Project Code (Site Code)
Alias Name: 60001060
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/16/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/04/2016
Comments: DTSC accepted the name change request.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 01/11/2012
Comments: The letter was mailed to the RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 05/12/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/23/2017
Comments: DTSC doesn’t have any comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/03/2014
Comments: Not reported

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 06/20/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/22/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/07/2017
Comments: Annual Cost Estimate letter sent 9/7/17.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 02/09/2009
Comments: Fully Executed VCA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/30/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/27/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/24/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/11/2017
Comments: DTSC conditionally approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Date: 09/20/2017
Comments: DTSC conditionally approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/05/2017
Comments: DTSC provided comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/09/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/03/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/14/2015
Comments: Annual cost estimate emailed and mailed to BP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 12/30/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/19/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/08/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2016
Comments: Not reported

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/25/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/07/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/17/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/27/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/25/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Date: 08/06/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/28/2010
Comments: DTSC approved the PEA with a recommendation of further action is needed at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 07/30/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/25/2010
Comments: DTSC executed the VCA Amendment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/25/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/15/2010
Comments: DTSC conditoally approved the SSI Workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/02/2011
Comments: DTSC conditionally approved the Report provided Carroll Shelby complies with DTSC comments enclosed therein

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 07/20/2011
Comments: DTSC conditionally approved the report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 09/22/2011

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 06/20/2013
Comments: DTSC approved the RAW along with the Negative Declaration.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 05/02/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 06/27/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/07/2011
Comments: DTSC approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2012
Comments: DTSC sent the approval letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2012
Comments: DTSC sent the Conditional Approval Letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/07/2012
Comments: DTSC sent the approval letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 07/30/2012
Comments: DTSC issued conditional approval.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/01/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/02/2012
Comments: DTSC reviewed and approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 09/19/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 05/06/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 05/02/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/06/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/10/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/29/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/08/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/02/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/01/2014

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 09/16/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/25/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 06/25/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/20/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/13/2015
Comments: DTSC conditionally approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2015
Comments: DTSC approved the Report.

Completed Area Name: PROJECT WIDE

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/28/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/10/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/06/2014
Comments: DTSC approved the Report with comments. Next round of sampling is due in December 2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2015
Comments: DTSC conditionally approved the Report with comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/07/2016
Comments: Annual Cost Estimate Letter sent to RP on 09/07/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 08/25/2010
Comments: DTSC executed the VCA Amendment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/18/2009
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2021
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2020
Future Area Name: PROJECT WIDE

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Future Sub Area Name:	Not reported
Future Document Type:	Remedy Constructed
Future Due Date:	2020
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	60001060
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	3.43
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Johnson Abraham
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	401476
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	02/09/2009
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	33.85818 / -118.2817
APN:	7339-009-005, 7339-009-006
Past Use:	ENGINE TESTING/REPAIR, FOUNDRY, MANUFACTURING - METAL, OFFICE BUILDING, UNDERGROUND STORAGE TANKS
Potential COC:	30003, 30022, 30024, 30025, 30026, 30027, 30187, 30193, 30194, 30535, 30536, 30564
Confirmed COC:	30003,30536,30564,30022,30024,30025,30026,30193-NO,30535,30187,30027, 30194-NO
Potential Description:	OTH, SOIL, SV
Alias Name:	Atlantic Auto & Truck Sales/Classic Cars
Alias Type:	Alternate Name
Alias Name:	Atlantic Auto & Truck Wrecking
Alias Type:	Alternate Name
Alias Name:	CHST
Alias Type:	Alternate Name
Alias Name:	Carroll Hall Shelby Trust
Alias Type:	Alternate Name
Alias Name:	Carroll Hall Shelby Trust U/D/T
Alias Type:	Alternate Name
Alias Name:	7339-009-005
Alias Type:	APN
Alias Name:	7339-009-006
Alias Type:	APN
Alias Name:	401476
Alias Type:	Project Code (Site Code)
Alias Name:	60001060
Alias Type:	Envirostor ID Number

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	03/16/2011
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	08/04/2016
Comments:	DTSC accepted the name change request.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	01/11/2012
Comments:	The letter was mailed to the RP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	05/12/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/23/2017
Comments:	DTSC doesn't have any comments.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/03/2014
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	06/20/2013
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	02/22/2013
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/07/2017
Comments:	Annual Cost Estimate letter sent 9/7/17.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Document Type: Correspondence
Completed Date: 03/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 02/09/2009
Comments: Fully Executed VCA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/30/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/27/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/24/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/11/2017
Comments: DTSC conditionally approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/20/2017
Comments: DTSC conditionally approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/05/2017
Comments: DTSC provided comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/09/2017
Comments: Not reported

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/03/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/14/2015
Comments: Annual cost estimate emailed and mailed to BP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 12/30/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/19/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/08/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/25/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/07/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Date: 07/21/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/17/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/27/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/25/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 08/06/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/28/2010
Comments: DTSC approved the PEA with a recommendation of further action is needed at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 07/30/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/25/2010
Comments: DTSC executed the VCA Amendment.

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/25/2010
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/15/2010
Comments: DTSC conditoally approved the SSI Workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/02/2011
Comments: DTSC conditionally approved the Report provided Carroll Shelby complies with DTSC comments enclosed therein

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 07/20/2011
Comments: DTSC conditionally approved the report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 09/22/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 06/20/2013
Comments: DTSC approved the RAW along with the Negative Declaration.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 05/02/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 06/27/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Document Type: Monitoring Report
Completed Date: 11/07/2011
Comments: DTSC approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2012
Comments: DTSC sent the approval letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2012
Comments: DTSC sent the Conditional Approval Letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/07/2012
Comments: DTSC sent the approval letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 07/30/2012
Comments: DTSC issued conditional approval.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/01/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/02/2012
Comments: DTSC reviewed and approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 09/19/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 05/06/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 05/02/2013
Comments: Not reported

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/06/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/10/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/29/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/08/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/02/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 09/16/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/01/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Date: 06/25/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 06/25/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/20/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/13/2015
Comments: DTSC conditionally approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2015
Comments: DTSC approved the Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/28/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/10/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/06/2014
Comments: DTSC approved the Report with comments. Next round of sampling is due in December 2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2015
Comments: DTSC conditionally approved the Report with comments.

CARROLL SHELBY ENTERPRISES FACILITY (Continued) **S103955020**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/07/2016
Comments: Annual Cost Estimate Letter sent to RP on 09/07/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 08/25/2010
Comments: DTSC executed the VCA Amendment.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/18/2009
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2021
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2020
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Remedy Constructed
Future Due Date: 2020
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

S91 **CAL COMPACT LANDFILL** **CA BOND EXP. PLAN** **S100833309**
SW **20300 SOUTH MAIN STREET** **N/A**
1/2-1 **CARSON, CA 90749**
0.596 mi.
3145 ft. **Site 1 of 2 in cluster S**

Relative:
Lower

Actual:
23 ft.

CA BOND EXP. PLAN:
Reponsible Party: RESPONSIBLE PARTY LEAD SITE CLEANUP WORKPLAN
Project Revenue Source Company: Not reported
Project Revenue Source Addr: Not reported
Project Revenue Source City,St,Zip: Not reported
Project Revenue Source Desc: DHS issued a RAO to the PRPs. DHS has budgeted $70,000 for oversight and monitoring of cleanup efforts and will recover 100 percent of the direct costs, plus staff costs and overhead related to the project. The responsible parties are expected to pay all costs associated with remedial investigation and cleanup activities.

CAL COMPACT LANDFILL (Continued) **S100833309**

Site Description: The Cal Compact Landfill is a former Class II landfill that occupies approximately 180 acres. Operations at this facility were conducted from 1959 to the late 1960's. The exact closure date is uncertain. Although the landfill was designated as a Class II facility, at least 250,000 cubic yards of hazardous waste liquids and sludges were disposed of at this site.

Hazardous Waste Desc: This site has a documented history of having received a broad range of petrochemicals, paints, solvents, dyes, organic resins, and inorganic salts. Heavy metals, pesticides such as DDD and DDE; herbicides (4,6-dinitrocresol and PCP), and solvents have been identified in the soil and landfill leachate at the site.

Threat To Public Health & Env: There is a potential for contaminants to migrate to ground water, surface water and air. Exposure of humans to airborne volatile organic compounds in air may be facilitated by movement of these substances from decomposing landfill material to the atmosphere. Although the fill material is capped with about three feet of cover soil, landfill gas containing methane has been detected escaping from cracks in the cover material and offsite. These gases may contain hazardous volatile organic substances. There is a potential threat to ground water posed by landfill leachate. Contamination has been found in the unused perched aquifer, which may be hydrologically connected to deeper, usable aquifers. The site is adjacent to the Dominguez Channel, a waterway that flows into Los Angeles Harbor. Should landfill materials become exposed, they may be transported as rain runoff to the Channel.

Site Activity Status: Substantial leachate and soil sampling on a 63-acre portion of the site was completed by a previous landowner. Further site characterization on the 63-acre portion and the remaining 117 acres is necessary. A RAO was issued to 14 potentially responsible parties (PRPs) on March 18, 1988. There are 12 PRPs that have been determined to be in noncompliance with the RAO. The remaining PRPs are expected to conduct RI/FS activities commencing in Winter, 1989.

S92 **CAL-COMPACT 2 SANITARY LANDFILL** **ENVIROSTOR** **S105023095**
SW **20300 SOUTH MAIN STREET** **LDS** **N/A**
1/2-1 **CARSON, CA 90745** **HIST CORTESE**
0.596 mi.
3145 ft. **Site 2 of 2 in cluster S**

Relative: **Lower**
Actual: **23 ft.**

ENVIROSTOR:

Facility ID:	19490193
Status:	Inactive - Needs Evaluation
Status Date:	05/09/2007
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	0
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	* Greg Holmes
Division Branch:	Cleanup Cypress
Assembly:	64
Senate:	35
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	EPA Grant
Latitude:	33.84648
Longitude:	-118.2796
APN:	NONE SPECIFIED

CAL-COMPACT 2 SANITARY LANDFILL (Continued) **S105023095**

Past Use: NONE SPECIFIED
Potential COC: * HOUSEHOLD WASTES * Metals - Sludge Asbestos Containing Materials (ACM * UNSPECIFIED OIL CONTAINING WASTE * DRILLING MUD
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: MAIN STREET DUMP
Alias Type: Alternate Name
Alias Name: SOUTH BAY SIX THEATERS
Alias Type: Alternate Name
Alias Name: CAD980636492
Alias Type: EPA Identification Number
Alias Name: CAD980636500
Alias Type: EPA Identification Number
Alias Name: 19490193
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 09/28/1983
Comments: FACILITY IDENTIFIED ID FROM ERRIS

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/15/1982
Comments: FACILITY IDENTIFIED LA CO 630 SERIES BASE COORD MAP (1973)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/14/1982
Comments: FACILITY IDENTIFIED CO ENGR INACTIVE WASTE DISPOSAL FACILITY

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/27/1994
Comments: Site screening/file search concludes NFA for DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/10/1987
Comments: SITE SCREENING DONE ON SWAT LIST

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 03/01/1984
Comments: PRELIM ASSESS DONE RCRA 3012

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported

CAL-COMPACT 2 SANITARY LANDFILL (Continued) **S105023095**

Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LDS:

Global Id: T10000004290
Latitude: 33.84272
Longitude: -118.2726
Case Type: Land Disposal Site
Status: Completed - Case Closed
Status Date: 09/26/2012
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Caseworker: WY
Local Agency: Not reported
RB Case Number: 59-045
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Not reported
EDR Link ID: T10000004290
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: CALSI
Reg Id: 19490193

T93 **CAL COMPACT LANDFILL** **HIST Cal-Sites** **S105689594**
SW **20400 MAIN ST** **NPDES** **N/A**
1/2-1 **CARSON, CA 90745** **WDS**
0.649 mi. **CIWQS**
3428 ft. **Site 1 of 3 in cluster T**

Relative: **Lower**

Actual: **26 ft.**

Calsite:
Region: CYPRESS
Facility ID: 19490019
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: SB
Branch Name: SO CAL - CYPRESS
File Name: Not reported
State Senate District: 04181996
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
NPL: Not Listed
SIC Code: 49
SIC Name: ELECTRIC, GAS & SANITARY SERVICES
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported

CAL COMPACT LANDFILL (Continued) **S105689594**

Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	DZOGAIB
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	LA
Region Water Control Board Name:	LOS ANGELES
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	55
State Senate District Code:	28
Facility ID:	19490019
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	OU-1
Proposed Budget:	0
AWP Completion Date:	12312006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06302032
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

CAL COMPACT LANDFILL (Continued) **S105689594**

For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08311998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06302009
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	LOU
Proposed Budget:	0
AWP Completion Date:	12312004

CAL COMPACT LANDFILL (Continued) **S105689594**

Revised Due Date:	Not reported
Comments Date:	01242005
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	RMDL
Activity Name:	REMEDIAL ACTION (RAP REQUIRED)
AWP Code:	LOU
Proposed Budget:	0
AWP Completion Date:	12312006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	DES
Activity Name:	DESIGN
AWP Code:	LOU
Proposed Budget:	0
AWP Completion Date:	09302005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0

CAL COMPACT LANDFILL (Continued) **S105689594**

Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04112001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CNDEC
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10122000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

CAL COMPACT LANDFILL (Continued) **S105689594**

Facility ID:	19490019
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	LOU
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03202001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	3M
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03072001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	SUPPL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03072001
Est Person-Yrs to complete:	0

CAL COMPACT LANDFILL (Continued) **S105689594**

Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04011979
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02191988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported

CAL COMPACT LANDFILL (Continued) **S105689594**

Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	RAO
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03301988
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA

CAL COMPACT LANDFILL (Continued) **S105689594**

AWP Code:	OU-1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05251995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU-1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08211995
Est Person-Yrs to complete:	0.35000
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	PPA
Activity Name:	PROSPECTIVE PURCHASER AGREEMENT
AWP Code:	OU-1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08141995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP

CAL COMPACT LANDFILL (Continued) **S105689594**

Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10251995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490019
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	OU-1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10251995
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

CAL COMPACT LANDFILL (Continued) **S105689594**

For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 19490019
Activity: ORDER
Activity Name: I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code: OU-2
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 04121999
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Facility ID: 19490019
Activity: DES
Activity Name: DESIGN
AWP Code: OU-1
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 06261996
Est Person-Yrs to complete: 0
Estimated Size: L
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0
Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: 20300 SOUTH MAIN STREET
Alternate City,St,Zip: CARSON, CA 90745
Alternate Address: DEL AMO BLVD BETW MAIN ST & SAN DIEGO FW
Alternate City,St,Zip: CARSON, CA 90745
Alternate Address: 20400 SOUTH MAIN STREET
Alternate City,St,Zip: CARSON, CA 90745

CAL COMPACT LANDFILL (Continued) **S105689594**

Alternate Address:	20400 MAIN ST
Alternate City,St,Zip:	CARSON, CA 90745
Background Info:	The Cal Compact Landfill is a former Class II landfill that occupies approximately 157 acres. Operations at this facility were conducted from 1959 to 1968. The landfill was designated as a Class II facility, and at least 250,000 cubic yards of hazardous waste liquids and sludges were disposed. Previous limited investigations show the presence of heavy metals, (lead, nickel, arsenic) dichloradiphenyl-trichloroethane (DDT), herbicides, organic resins, hydrocarbons, and solvents in the soil and landfill leachate at the site. There is a potential for contaminants to migrate to groundwater, surface water and air. Exposure of humans to airborne volatile organic compounds in air may be facilitated by movement of these substances from decomposing landfill material to the atmosphere. Although the fill material was capped with about 3 to 20 feet of cover soil when the landfill ceased operations, landfill gas containing methane has been detected escaping from cracks in the cover material and offsite. These gases may contain hazardous volatile organic substances. There is a potential threat to groundwater posed by landfill leachate. Contamination has been found in the unused perched aquifer, which may be hydrologically connected to deeper, usable aquifers. The site is adjacent to the Dominguez Channel, a waterway that flows into the Los Angeles Harbor. Should landfill materials become exposed, they may be transported as rain runoff to the Channel. A RAO was issued in March 1988 to 14 PRP's. Twelve of the 14 PRPs have been found in noncompliance with the RAO. Due to the bankruptcy of the Landowner, the RI did not start until September 1990. This work is being conducted by a trustee of the bankruptcy court.
Comments Date:	01081981
Comments:	Determination requested by City of Carson.
Comments Date:	01152004
Comments:	LFG extraction test completed.
Comments Date:	01242005
Comments:	Groundwater monitoring of Gage aquifer.
Comments Date:	01252005
Comments:	Notice of Exemption sent to the State Clearinghouse.
Comments Date:	02191988
Comments:	Site Screening Done: Site is part of the State Bond Expenditure
Comments Date:	02191988
Comments:	Plan.
Comments Date:	02231993
Comments:	A conference call was held with Metro 2000 and its consultant
Comments Date:	02231993
Comments:	regarding the Lynwood and Silverado aquifer investigation.
Comments Date:	03072001
Comments:	Consent decree with 3M Company. Consent decree with site
Comments Date:	03072001
Comments:	owners - "supplemental decree".
Comments Date:	03131981
Comments:	Determination requested by Developer.
Comments Date:	03202001
Comments:	Remedial investigation of Lower OU (OU2) completed. An FS

CAL COMPACT LANDFILL (Continued) **S105689594**

Comments Date:	03202001
Comments:	will not be done. However, a RAP is required.
Comments Date:	04011979
Comments:	Facility Identified: On Eckhardt List as Cal & Monsanto.
Comments Date:	04011979
Comments:	Site used by Tennco Chemical.
Comments Date:	04041995
Comments:	L.A. MetroMall has proposed to construct a retail outlet mall at
Comments Date:	04041995
Comments:	the Cal Compact Landfill site. The mall, if constructed, will be
Comments Date:	04041995
Comments:	one of the largest outlet shopping centers in the nation. This
Comments Date:	04041995
Comments:	proposed project will generate hundreds of new jobs and millions
Comments Date:	04112001
Comments:	As part of a lawsuit settlement between the Defense Group and
Comments Date:	04112001
Comments:	3M Company and DTSC, DTSC would be paid past costs, future
Comments Date:	04112001
Comments:	oversight costs, and remediation costs.
Comments Date:	04121999
Comments:	Letter Agreement to investigate the lower Operable Unit at the
Comments Date:	04121999
Comments:	site.
Comments Date:	05011981
Comments:	HMMS sampling.
Comments Date:	05082003
Comments:	Supplemental decree with site owners.
Comments Date:	05251995
Comments:	DTSC issues a Remedial Action Order and Consent Order to BKK
Comments Date:	05251995
Comments:	Corporation for the Cal Compact site. The Order applies to the
Comments Date:	05251995
Comments:	Upper Operable Unit.
Comments Date:	06182003
Comments:	Consent Decree with municipalities.
Comments Date:	07251991
Comments:	Former Class I landfill. Contaminants include drilling muds,
Comments Date:	07251991
Comments:	petrochemicals, solvents, paints, heavy metals (Pb, Ni, As),
Comments Date:	07251991
Comments:	pesticides, DDT, and herbicides.
Comments Date:	08141995
Comments:	The Department of Toxic Substances Control enters into this
Comments Date:	08141995
Comments:	Consent Decree with the Commercial Realty Projects, Inc.
Comments Date:	08141995
Comments:	(CRP) to provide for certain environmental response actions
Comments Date:	08141995
Comments:	at, and to resolve certain liability claims with respect to,
Comments Date:	08141995
Comments:	the Cal Compact landfill site located in the city of Carson.
Comments Date:	08211995
Comments:	The Remedial Investigation/Feasibility Study for the Cal Compact
Comments Date:	08211995
Comments:	Landfill site prepared by Brown & Root Environmental is approved.
Comments Date:	08252003

CAL COMPACT LANDFILL (Continued) **S105689594**

Comments:	DTSC approved LFG System Pilot Study Workplan.
Comments Date:	09091998
Comments:	Agreement to perform work signed. Workplan to locate abandoned
Comments Date:	09091998
Comments:	oil and water wells, develop plans to abandon those wells, if
Comments Date:	09091998
Comments:	located, conduct groundwater monitoring.
Comments Date:	09202001
Comments:	DTSC met with RP's representative and consultant to discuss
Comments Date:	09202001
Comments:	installation of interim landfill gas collection system.
Comments Date:	10122000
Comments:	Consent Decree with Defense Group. Consent Decree with 3M Co.
Comments Date:	10122000
Comments:	Supplemental Decree.
Comments Date:	10151980
Comments:	Received Eckhardt Survey.
Comments Date:	10231980
Comments:	Facility Drive-By: Site looks suspicious.
Comments Date:	10251995
Comments:	DTSC completed its review of the RAP for the Cal Compact Landfill
Comments Date:	10251995
Comments:	Upper Operable Unit, and has determined that the plan meets
Comments Date:	10251995
Comments:	statutory requirements. CEQA documents were filed and approved
Comments Date:	10251995
Comments:	accordingly.
Comments Date:	11131980
Comments:	Met with property-owner representatives.
Comments Date:	12021980
Comments:	Sampling by HMMS.
Comments Date:	12052003
Comments:	LFG pilot test wells installed.
Comments Date:	12102003
Comments:	LFG pilot test headerline installed.
Comments Date:	12191989
Comments:	EPA's reassessment of Screening Site Assessment recommends
Comments Date:	12191989
Comments:	Listing Site Inspection (high-priority).
Comments Date:	12191996
Comments:	In December 1996, the U.S. District Court approved the Consent
Comments Date:	12191996
Comments:	Decree. PRPs opposing the Consent Decree filed an appeal with
Comments Date:	12191996
Comments:	the 9th circuit Court of Appeals. The appeal is not scheduled
Comments Date:	12191996
Comments:	to be heard until mid 1998.
Comments Date:	12271995
Comments:	The Attorney General's Office lodged athe Consent Decree, on
Comments Date:	12271995
Comments:	behalf of DTSC, with the US District Court for the Central
Comments Date:	12271995
Comments:	District of California, in case #95-8773-JMI (JRx). A 30
Comments Date:	12271995
Comments:	day public notice period was held and ran through 3/7/96.
Comments Date:	04041995
Comments:	of dollars of revenue for the state and local economy.

CAL COMPACT LANDFILL (Continued) **S105689594**

ID Name: CALSTARS CODE
ID Value: 400019
ID Name: BEP DATABASE PCODE
ID Value: P41008
ID Name: EPA IDENTIFICATION NUMBER
ID Value: CAD980735955
Alternate Name: CAL COMPACT LANDFILL
Alternate Name: Not reported
Special Programs Code: Not reported
Special Programs Name: Not reported

NPDES:

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	465924
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C374699
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	11/16/2015
PROCESSED DATE:	11/23/2015
STATUS CODE NAME:	Active
STATUS DATE:	11/23/2015
PLACE SIZE:	157
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Mike Cowan
FACILITY CONTACT TITLE:	QSP
FACILITY CONTACT PHONE:	310-965-0137
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Mike.Cowan@tetratech.com
OPERATOR NAME:	Carson Reclamation Authority
OPERATOR ADDRESS:	701 East Carson Street
OPERATOR CITY:	Carson
OPERATOR STATE:	California
OPERATOR ZIP:	90745
OPERATOR CONTACT NAME:	John Raymond
OPERATOR CONTACT TITLE:	Executive Director
OPERATOR CONTACT PHONE:	310-952-1773
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	jraymond@carson.ca.us
OPERATOR TYPE:	Government Agency Combination
DEVELOPER NAME:	Carson Reclamation Authority
DEVELOPER ADDRESS:	701 East Carson Street
DEVELOPER CITY:	Carson
DEVELOPER STATE:	California

CAL COMPACT LANDFILL (Continued) **S105689594**

DEVELOPER ZIP:	90745
DEVELOPER CONTACT NAME:	John Raymond
DEVELOPER CONTACT TITLE:	Executive Director
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	562-618-0032
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	N
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N
CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	N
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	N
CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	Y
RECEIVING WATER NAME:	Dominguez Channel; Los Angeles Harbor
CERTIFIER NAME:	John Raymond
CERTIFIER TITLE:	Executive Director
CERTIFICATION DATE:	16-NOV-15
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	465924
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19C374699
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/23/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Carson Reclamation Authority
Discharge Address:	701 East Carson Street
Discharge City:	Carson
Discharge State:	California
Discharge Zip:	90745
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported

CAL COMPACT LANDFILL (Continued) **S105689594**

FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

WDS:

Facility ID:	4 19I012013
Facility Type:	Not reported
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board

CAL COMPACT LANDFILL (Continued) **S105689594**

Subregion:	4
Facility Telephone:	Not reported
Facility Contact:	Not reported
Agency Name:	L.A. METROMALL L.L.C.
Agency Address:	Not reported
Agency City,St,Zip:	0
Agency Contact:	Not reported
Agency Telephone:	Not reported
Agency Type:	Not reported
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Agency:	Cal Compact Landfill
Agency Address:	4350 Von Karman Ave Ste 200, Newprot Beach, CA 92660
Place/Project Type:	Industrial - Refuse Systems
SIC/NAICS:	4953
Region:	4
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	4 19I021247
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	10/29/2007
Termination Date:	01/15/2009
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0

CAL COMPACT LANDFILL (Continued) **S105689594**

Latitude:	33.84644
Longitude:	-118.2801
Agency:	Carson Reclamation Authority
Agency Address:	701 East Carson Street, Carson, CA 90745
Place/Project Type:	Construction
SIC/NAICS:	Not reported
Region:	4
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	4 19C374699
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	11/23/2015
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	33.8453
Longitude:	-118.28

T94 **CARSON MARKETPLACE LLC** **RESPONSE** **S101480945**
SW **20400 MAIN ST** **ENVIROSTOR** **N/A**
1/2-1 **CARSON, CA 90745** **SWF/LF**
0.649 mi. **LDS**
3428 ft. **Site 2 of 3 in cluster T** **Cortese**
HAZNET
Relative: **HIST CORTESE**
Lower **LOS ANGELES CO. HMS**
Actual: **NPDES**
26 ft. **CIWQS**

RESPONSE:

Facility ID:	19490019
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	157
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Daniel Zogaib
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	401716
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	64
Senate:	35
Special Program Status:	Designation of Single Agency
Status:	Active
Status Date:	04/18/1996
Restricted Use:	NO
Funding:	Responsible Party

CARSON MARKETPLACE LLC (Continued) **S101480945**

Latitude:	33.84260
Longitude:	-118.2723
APN:	NONE SPECIFIED
Past Use:	LANDFILL - DOMESTIC, LANDFILL - DOMESTIC
Potential COC :	Methane Polychlorinated biphenyls (PCBs Tetrachloroethylene (PCE TPH-gas 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Polychlorinated biphenyls (PCBs, see IRIS Xylenes
Confirmed COC:	No Contaminants found Polychlorinated biphenyls (PCBs, see IRIS Polychlorinated biphenyls (PCBs Tetrachloroethylene (PCE TPH-gas 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Methane Xylenes
Potential Description:	OTH, OTH, SOIL
Alias Name:	Avalon at South Bay
Alias Type:	Alternate Name
Alias Name:	Carson Marketplace
Alias Type:	Alternate Name
Alias Name:	CAD980735955
Alias Type:	EPA Identification Number
Alias Name:	110014015243
Alias Type:	EPA (FRS #)
Alias Name:	110033617281
Alias Type:	EPA (FRS #)
Alias Name:	SL204411577
Alias Type:	GeoTracker Global ID
Alias Name:	P41008
Alias Type:	PCode
Alias Name:	400721
Alias Type:	Project Code (Site Code)
Alias Name:	401325
Alias Type:	Project Code (Site Code)
Alias Name:	401580
Alias Type:	Project Code (Site Code)
Alias Name:	401716
Alias Type:	Project Code (Site Code)
Alias Name:	19490019
Alias Type:	Envirostor ID Number
Alias Name:	http://www.cra-cclf.com
Alias Type:	External Website Link / URL

Completed Info:

Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	04/27/2017
Comments:	Approved
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/27/2017
Comments:	Aompleted
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/20/2017
Comments:	Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/24/2016
Comments: Conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/30/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/24/2016
Comments: Approved for import

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/20/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/02/2017
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/14/2017
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/14/2017
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Consent Decree
Completed Date: 02/04/2004
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 10/25/2011
Comments: Reminder letter sent for unpaid past due invoice #10SM3071.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/31/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/31/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 07/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 07/16/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/09/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 08/27/2015
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/24/2015
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/22/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 04/14/2016
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/04/2017
Comments: Not reported

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 01/25/2005
Comments: Notice of Exemption sent to the State Clearinghouse.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 01/24/2018
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/20/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/22/2017
Comments: Change of consultant from Tetratech to SCS Engineers.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 09/08/2017
Comments: Completed.

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 04/12/1999
Comments: Letter Agreement to investigate the lower Operable Unit at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 10/25/1995
Comments: DTSC completed its review of the RAP for the Cal Compact Landfill Upper Operable Unit, and has determined that the plan meets statutory requirements. CEQA documents were filed and approved accordingly.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 05/25/1995
Comments: DTSC issues a Remedial Action Order and Consent Order to BKK Corporation for the Cal Compact site. The Order applies to the Upper Operable Unit.

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 03/30/1988
Comments: Remedial Action Order issued to the Defense Group to investigate the Lower Operable Unit

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/01/1979
Comments: Facility Identified: On Eckhardt List as Cal & Monsanto. Site used by Tennco Chemical.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Escrow Agreement
Completed Date: 03/27/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 03/07/2001
Comments: Consent decree with 3M Company. Consent decree with site owners - "supplemental decree".

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Imminent and/or Substantial Endangerment Order
Completed Date: 03/18/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 02/08/2006
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 08/10/2017
Comments: Conditionally approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 04/11/2001
Comments: As part of a lawsuit settlement between the Defense Group and 3M Company and DTSC, DTSC would be paid past costs, future oversight costs, and remediation costs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Prospective Purchaser Agreement
Completed Date: 08/14/1995

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: The Department of Toxic Substances Control enters into this Consent Decree with the Commercial Realty Projects, Inc. (CRP) to provide for certain environmental response actions at, and to resolve certain liability claims with respect to, the Cal Compact landfill site located in the city of Carson.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/10/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/30/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 06/18/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/09/2017
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 2
Completed Document Type: Technical Workplan
Completed Date: 11/02/2017
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/26/1996
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 10/25/1995
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/21/1995
Comments: The Remedial Investigation/Feasibility Study for the Cal Compact Landfill site prepared by Brown & Root Environmental is approved.

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 12/30/1989
Comments: Not reported

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 03/20/2001
Comments: Remedial investigation of Lower OU (OU2) completed. An FS will not be done. However, a RAP is required.

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 01/24/2005
Comments: DTSC revised the LOURAP and therefore there is no approval letter.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/28/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 3
Completed Document Type: Correspondence
Completed Date: 08/06/2014
Comments: Completed and sent.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 09/28/2006
Comments: Compliance Framework Agreement between DTSC and Carson Marketplace, LLC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 11/01/1993
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 05/18/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 12/25/1995
Comments: Not reported

Completed Area Name: Lower Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 11/02/2005
Comments: Report was acceptable

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 10/09/1992
Comments: Baseline Risk Assessment completed on 10/9/1992

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/01/2000
Comments: Report of Hydrostratigraphic Investigation was deemed acceptable. It was performed to determine the depth of the Bellflower Aquifer and start of the Gage Aquifer.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/22/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/01/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/02/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/05/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Document Type: Monitoring Report
Completed Date: 02/10/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/31/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/22/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/08/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/18/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/24/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2003
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/21/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/13/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/07/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/23/2005
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/30/2006
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/19/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 02/10/2006
Comments: This document was approved verbally on 2/10/2006 because it was to be inserted into the Final Landfill Cover Soil Sampling Work Plan, which was approved on 3/15/2006. Letter approving that document has been uploaded as it also states that the DQOs were approved as well.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/15/2006
Comments: Approved

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/23/2006
Comments: Accepted

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/15/2006
Comments: Accepted

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 11/09/2007
Comments: Accepted

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 06/23/2006
Comments: Accepted

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/27/2008
Comments: Sent email approval on May 2, 2008

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/02/2008
Comments: Report was acceptable.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/09/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/17/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 02/11/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 02/29/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 02/15/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 02/15/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Newsletter
Completed Date: 04/24/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Newsletter
Completed Date: 05/08/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 01/30/2008
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/01/2008
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan w/ESD
Completed Date: 07/30/2009
Comments: Document ready for public review.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/10/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2011
Comments: Approved

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/10/2011
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/21/2011
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/21/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/18/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2011
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/14/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 10/21/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/20/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 03/01/1981
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/01/1982
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/05/1978
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/01/1983
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/20/1984
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/01/1984
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/01/1985
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/22/1986
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/10/1987
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 06/01/1988
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 01/18/1990
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 07/01/1990
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 01/17/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 01/25/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/02/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/21/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/29/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/12/1991
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 07/15/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 08/14/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/23/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/31/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/17/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/09/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 06/19/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/17/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 12/17/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 11/01/1993
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 12/01/1993
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 01/01/1994
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Workplan
Completed Date: 09/26/1995
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 08/08/1995
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 08/01/1995
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Workplan
Completed Date: 09/07/1995
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 10/31/1995
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 05/02/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 12/05/1995
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 12/08/1995
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 03/01/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 05/02/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 05/16/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/01/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 05/24/1997
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/01/1997
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/03/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/07/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/15/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/18/1998
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 09/15/1998
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 12/03/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 04/21/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/29/1999
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/01/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/05/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/23/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/23/1999
Comments: Completed

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 12/03/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 02/21/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 05/30/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 06/07/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/09/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/03/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/09/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/14/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/24/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/05/2002
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/07/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/08/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/21/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/12/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 02/05/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 04/08/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/13/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/30/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 02/22/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 01/29/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 02/20/2004
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 12/27/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 12/27/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 03/18/2005
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/31/2005
Comments: Approved

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 07/14/2005
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/10/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2005
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/29/2005
Comments: Received

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/11/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 11/29/2006
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/08/2006
Comments: Received

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 08/15/2006
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/20/2006
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/27/2006
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/20/2006
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 01/01/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/13/2007
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 03/05/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 02/09/2007
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2007
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/27/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/24/2007
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 05/24/2007
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 03/14/2007
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 06/28/2007
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 07/27/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/01/2007
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/17/2007
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 07/19/2007
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/31/2007
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/09/2012
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2012
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/01/2008
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 08/04/2008
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/01/2009
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2012
Comments: approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2012
Comments: approved

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/25/2012
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2013
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Financial Assurance Documentation
Completed Date: 10/24/2013
Comments: This document is no longer valid as the project has changed and so has the FA.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/13/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/25/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/10/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/20/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/08/2014
Comments: Discussed RDP with Carson Marketplace during meeting. No DTSC letter will be required.

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/02/2014
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 01/16/2014
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/09/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/14/2014
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 12/23/2008
Comments: Conditionally approved the 95% designs.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/17/2014
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Manual
Completed Date: 06/11/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/01/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/11/2015

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/11/2015
Comments: Monitoring was not conducted due to land transfer and funding issues.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/07/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/14/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/28/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/11/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/18/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2014
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/01/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/08/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/29/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/06/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/13/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/20/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2014

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/10/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/17/2014
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/24/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/16/2014
Comments: Completed. No Letter necessary.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/13/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/28/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/18/2015
Comments: Complered

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/19/2015

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/24/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/08/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/15/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/22/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/15/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/21/2015
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/27/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/12/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/19/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/26/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/10/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/17/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/24/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2015

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/07/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/14/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/21/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/28/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/04/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/11/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/18/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/25/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/02/2015
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/16/2015
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/23/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/30/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/13/2015
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/20/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/11/2015

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/18/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/28/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/05/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/08/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/15/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/22/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/29/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/05/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/12/2016
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/19/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/04/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/11/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/18/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/25/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/04/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/15/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/22/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2016

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/13/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/20/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/27/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/10/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/17/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/24/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/01/2016
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/15/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/20/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/29/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/12/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/19/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/02/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/09/2016

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/21/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/30/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/28/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/01/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2014
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/07/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/2015

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/05/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/04/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/11/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/03/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/05/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/02/2016
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/05/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/03/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/07/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/12/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/18/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/22/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 3
Completed Document Type: Monitoring Report
Completed Date: 10/10/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 12/13/2014

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 09/25/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/13/2014
Comments: Completed and accepted.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 04/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 02/10/2015
Comments: Approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 07/29/2009
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 08/24/2009
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 11/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 12/29/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/27/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 07/29/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 11/13/2013
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/08/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 07/13/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/20/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/22/2016

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2016
Comments: Consultant will not be submitting report until February 2016

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/31/2016
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2017
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/16/2015
Comments: Conditionally approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 11/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/16/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/03/2016
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Cell 2
Completed Document Type: Technical Workplan
Completed Date: 04/05/2016
Comments: Conditionally approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/03/2016
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/21/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/23/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/16/2015
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/25/2017

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 07/16/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 02/04/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 02/22/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 06/22/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 12/20/2017
Comments: Meeting complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 2
Completed Document Type: Correspondence
Completed Date: 07/19/2016
Comments: Completed and sent.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/16/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/01/1990
Comments: Received

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/07/2015
Comments: Completed and sent.

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	08/20/2015
Comments:	Completed
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Report
Future Due Date:	2018
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 4
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2021
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 3
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2022
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 1
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2025
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 4
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2021
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 2
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2020
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 4
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2022
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 5
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2024
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 3
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2023
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 2
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2021
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 1
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2024
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 1
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2024
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 5
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2023

CARSON MARKETPLACE LLC (Continued) **S101480945**

Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 2
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2020
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 5
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2023
Schedule Area Name:	Upper Operable Unit
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	01/14/2018
Schedule Revised Date:	06/12/2018
Schedule Area Name:	Upper Operable Unit - MULTIPLE SITES
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Remedial Action Completion Report
Schedule Due Date:	06/28/2018
Schedule Revised Date:	Not reported
Schedule Area Name:	Upper Operable Unit
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report
Schedule Due Date:	05/16/2018
Schedule Revised Date:	Not reported

ENVIROSTOR:

Facility ID:	19490019
Status:	Active
Status Date:	04/18/1996
Site Code:	401716
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	157
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Daniel Zogaib
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	64
Senate:	35
Special Program:	Designation of Single Agency
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.84260
Longitude:	-118.2723
APN:	NONE SPECIFIED
Past Use:	LANDFILL - DOMESTIC, LANDFILL - DOMESTIC
Potential COC:	Methane Polychlorinated biphenyls (PCBs Tetrachloroethylene (PCE TPH-gas 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Polychlorinated biphenyls (PCBs, see IRIS Xylenes
Confirmed COC:	No Contaminants found Polychlorinated biphenyls (PCBs, see IRIS Polychlorinated biphenyls (PCBs Tetrachloroethylene (PCE TPH-gas 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Methane Xylenes
Potential Description:	OTH, OTH, SOIL
Alias Name:	Avalon at South Bay

CARSON MARKETPLACE LLC (Continued) **S101480945**

Alias Type:	Alternate Name
Alias Name:	Carson Marketplace
Alias Type:	Alternate Name
Alias Name:	CAD980735955
Alias Type:	EPA Identification Number
Alias Name:	110014015243
Alias Type:	EPA (FRS #)
Alias Name:	110033617281
Alias Type:	EPA (FRS #)
Alias Name:	SL204411577
Alias Type:	GeoTracker Global ID
Alias Name:	P41008
Alias Type:	PCode
Alias Name:	400721
Alias Type:	Project Code (Site Code)
Alias Name:	401325
Alias Type:	Project Code (Site Code)
Alias Name:	401580
Alias Type:	Project Code (Site Code)
Alias Name:	401716
Alias Type:	Project Code (Site Code)
Alias Name:	19490019
Alias Type:	Envirostor ID Number
Alias Name:	http://www.cra-cclf.com
Alias Type:	External Website Link / URL

Completed Info:

Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	04/27/2017
Comments:	Approved
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/27/2017
Comments:	Aompleted
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/20/2017
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	08/09/2017
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	10/24/2016
Comments:	Conditionally approved.
Completed Area Name:	PROJECT WIDE

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/30/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/24/2016
Comments: Approved for import

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/20/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/02/2017
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/14/2017
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/14/2017
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Consent Decree
Completed Date: 02/04/2004
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 10/25/2011
Comments: Reminder letter sent for unpaid past due invoice #10SM3071.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/31/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/31/2016

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 07/30/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 07/16/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/09/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 08/27/2015
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/24/2015
Comments: Complete

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 10/22/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 04/14/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/04/2017
Comments: Not reported

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Notice of Exemption
Completed Date: 01/25/2005
Comments: Notice of Exemption sent to the State Clearinghouse.

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 01/24/2018
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/20/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/22/2017
Comments: Change of consultant from Tetratech to SCS Engineers.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 09/08/2017
Comments: Completed.

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 04/12/1999
Comments: Letter Agreement to investigate the lower Operable Unit at the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 10/25/1995
Comments: DTSC completed its review of the RAP for the Cal Compact Landfill Upper Operable Unit, and has determined that the plan meets statutory requirements. CEQA documents were filed and approved accordingly.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 05/25/1995
Comments: DTSC issues a Remedial Action Order and Consent Order to BKK Corporation for the Cal Compact site. The Order applies to the Upper Operable Unit.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 03/30/1988
Comments: Remedial Action Order issued to the Defense Group to investigate the Lower Operable Unit

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/01/1979
Comments: Facility Identified: On Eckhardt List as Cal & Monsanto. Site used by

CARSON MARKETPLACE LLC (Continued) **S101480945**

Tennco Chemical.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Escrow Agreement
Completed Date: 03/27/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 03/07/2001
Comments: Consent decree with 3M Company. Consent decree with site owners - "supplemental decree".

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Imminent and/or Substantial Endangerment Order
Completed Date: 03/18/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 02/08/2006
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 08/10/2017
Comments: Conditionally approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 04/11/2001
Comments: As part of a lawsuit settlement between the Defense Group and 3M Company and DTSC, DTSC would be paid past costs, future oversight costs, and remediation costs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Prospective Purchaser Agreement
Completed Date: 08/14/1995
Comments: The Department of Toxic Substances Control enters into this Consent Decree with the Commercial Realty Projects, Inc. (CRP) to provide for certain environmental response actions at, and to resolve certain liability claims with respect to, the Cal Compact landfill site located in the city of Carson.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2017
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/10/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/30/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 06/18/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/09/2017
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 2
Completed Document Type: Technical Workplan
Completed Date: 11/02/2017
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 06/26/1996
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 10/25/1995
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/21/1995
Comments: The Remedial Investigation/Feasibility Study for the Cal Compact Landfill site prepared by Brown & Root Environmental is approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 12/30/1989
Comments: Not reported

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 03/20/2001
Comments: Remedial investigation of Lower OU (OU2) completed. An FS will not be

CARSON MARKETPLACE LLC (Continued) **S101480945**

done. However, a RAP is required.

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 01/24/2005
Comments: DTSC revised the LOURAP and therefore there is no approval letter.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/28/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 3
Completed Document Type: Correspondence
Completed Date: 08/06/2014
Comments: Completed and sent.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 09/28/2006
Comments: Compliance Framework Agreement between DTSC and Carson Marketplace, LLC

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Environmental Impact Report
Completed Date: 11/01/1993
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Amendment - Order/Agreement
Completed Date: 05/18/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 12/25/1995
Comments: Not reported

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 11/02/2005
Comments: Report was acceptable

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 10/09/1992
Comments: Baseline Risk Assessment completed on 10/9/1992

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/01/2000
Comments: Report of Hydrostratigraphic Investigation was deemed acceptable. It was performed to determine the depth of the Bellflower Aquifer and start of the Gage Aquifer.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/22/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/01/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/02/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/05/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/31/2000
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/22/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/08/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/18/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/24/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/14/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/21/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/13/2004

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/07/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/23/2005
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/30/2006
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/19/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 02/10/2006
Comments: This document was approved verbally on 2/10/2006 because it was to be inserted into the Final Landfill Cover Soil Sampling Work Plan, which was approved on 3/15/2006. Letter approving that document has been uploaded as it also states that the DQOs were approved as well.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/15/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/23/2006
Comments: Accepted

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/15/2006

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments:	Accepted
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Quality Assurance Workplan
Completed Date:	11/09/2007
Comments:	Accepted
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Pilot Study/Treatability Workplan
Completed Date:	06/23/2006
Comments:	Accepted
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	05/27/2008
Comments:	Sent email approval on May 2, 2008
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	06/02/2008
Comments:	Report was acceptable.
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	04/09/2008
Comments:	Completed.
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	04/17/2008
Comments:	Completed.
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	02/11/2008
Comments:	Completed.
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	02/29/2008
Comments:	Completed.
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	02/15/2008
Comments:	Completed.
Completed Area Name:	Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 02/15/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Newsletter
Completed Date: 04/24/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Newsletter
Completed Date: 05/08/2008
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 01/30/2008
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/01/2008
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan w/ESD
Completed Date: 07/30/2009
Comments: Document ready for public review.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/10/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/10/2011
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/21/2011

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/21/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/18/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2011
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/14/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 10/21/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/20/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2011
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/01/1981
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/01/1982
Comments: Completed

Completed Area Name: PROJECT WIDE

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/05/1978
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/01/1983
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/20/1984
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/01/1984
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/01/1985
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/22/1986
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/10/1987
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 06/01/1988
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 01/18/1990
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fact Sheets
Completed Date: 07/01/1990

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 01/17/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 01/25/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/02/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/21/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/29/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/12/1991
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 07/15/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 08/14/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/23/1991
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/31/1991
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/17/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/09/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 06/19/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/17/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 12/17/1992
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 11/01/1993
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 12/01/1993
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 01/01/1994
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Workplan
Completed Date: 09/26/1995

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Feasibility Study Report
Completed Date:	08/08/1995
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Report
Completed Date:	08/01/1995
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Treatability Study Workplan
Completed Date:	09/07/1995
Comments:	Completed
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Health & Safety Plan
Completed Date:	10/31/1995
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Design - Preliminary/Intermediate
Completed Date:	05/02/1996
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Treatability Study Report
Completed Date:	12/05/1995
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Treatability Study Report
Completed Date:	12/08/1995
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Design - Preliminary/Intermediate
Completed Date:	03/01/1996
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Design - Preliminary/Intermediate
Completed Date:	05/02/1996
Comments:	Completed
Completed Area Name:	Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 05/16/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/01/1996
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 05/24/1997
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/01/1997
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/03/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/07/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/15/1998
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/18/1998
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 09/15/1998
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 12/03/1998

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 04/21/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/29/1999
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/01/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 08/05/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/23/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/23/1999
Comments: Completed

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/03/1999
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 02/21/2000
Comments: Completed

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 05/30/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 06/07/2000
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/09/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/03/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/09/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/14/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/24/2001
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/05/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/07/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/08/2002

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/21/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/12/2002
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 02/05/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 04/08/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/13/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/30/2003
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 02/22/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/29/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 02/20/2004
Comments: Approved

Completed Area Name: Upper Operable Unit

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 12/27/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 12/27/2004
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/09/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 03/18/2005
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/31/2005
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 07/14/2005
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/10/2005

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2005
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Correspondence - Received
Completed Date: 08/29/2005
Comments: Received

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/11/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/29/2006
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 02/08/2006
Comments: Received

Completed Area Name: PROJECT WIDE

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 08/15/2006
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/20/2006
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/27/2006
Comments: Approved

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/20/2006
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 01/01/2006
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 02/13/2007
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 03/05/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 02/09/2007
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2007
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/27/2007

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	05/24/2007
Comments:	Approved
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Well Decommissioning Workplan
Completed Date:	05/24/2007
Comments:	Approved
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	*Correspondence - Received
Completed Date:	03/14/2007
Comments:	Approved
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	*Correspondence - Received
Completed Date:	06/28/2007
Comments:	Approved
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Health & Safety Plan
Completed Date:	07/27/2007
Comments:	Completed
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	08/01/2007
Comments:	Approved
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	04/17/2007
Comments:	Approved
Completed Area Name:	Upper Operable Unit
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	07/19/2007
Comments:	Approved
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	10/31/2007
Comments:	Approved
Completed Area Name:	PROJECT WIDE

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/09/2012
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2012
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2012
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/01/2008
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 08/04/2008
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 05/01/2009
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2012
Comments: approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/15/2012
Comments: approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/25/2012
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2013

CARSON MARKETPLACE LLC (Continued) **S101480945**

Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Financial Assurance Documentation
Completed Date: 10/24/2013
Comments: This document is no longer valid as the project has changed and so has the FA.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/13/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/25/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/10/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/20/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2013
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 08/08/2014
Comments: Discussed RDP with Carson Marketplace during meeting. No DTSC letter will be required.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/02/2014
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 01/16/2014
Comments: Completed.

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/09/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/14/2014
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 12/23/2008
Comments: Conditionally approved the 95% designs.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/17/2014
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Manual
Completed Date: 06/11/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 10/01/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/11/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/11/2015
Comments: Monitoring was not conducted due to land transfer and funding issues.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 07/07/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/14/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/28/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/04/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/11/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/18/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/01/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/08/2014
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/22/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/29/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/06/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/13/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/20/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/27/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/04/2014
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/10/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 11/17/2014
Comments: Completed.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/24/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/16/2014
Comments: Completed. No Letter necessary.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/23/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/13/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/21/2015
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/28/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/10/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/18/2015
Comments: Complered

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/24/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/19/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/24/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 04/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/08/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/15/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/22/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/15/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/21/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/27/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/05/2015
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/12/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/19/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/26/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/10/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/17/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/24/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/07/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 08/14/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/21/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/28/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/04/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/11/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/18/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/25/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/02/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/16/2015
Comments: Complete

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/23/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/30/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/13/2015
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/20/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/11/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/18/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 12/28/2015
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/05/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/08/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/15/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/22/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/29/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/05/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/12/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/19/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/04/2016
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/11/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/18/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/25/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/04/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/15/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/22/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/29/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/06/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 05/13/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/20/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/27/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/10/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/17/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/24/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/01/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/15/2016
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/20/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/29/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/05/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/12/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/19/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/02/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/09/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 09/21/2016
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/30/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/30/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/31/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/28/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/01/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/31/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/04/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/07/2015
Comments: Completed

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/06/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/14/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/03/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/31/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/05/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 11/04/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2016
Comments: completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/04/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/11/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/03/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/05/2016
Comments: complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/02/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/05/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/03/2016
Comments: Complete

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/07/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/12/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/18/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/22/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 3
Completed Document Type: Monitoring Report
Completed Date: 10/10/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 12/13/2014
Comments: Complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 09/25/2014
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 10/13/2014
Comments: Completed and accepted.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 04/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 02/10/2015
Comments: Approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 07/29/2009
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 08/24/2009
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/28/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 11/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 11/09/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 12/29/2015
Comments: Approved

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/27/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 07/29/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 11/13/2013
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/08/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 07/13/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/20/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/22/2016
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/03/2016
Comments: Consultant will not be submitting report until February 2016

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 05/31/2016
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/14/2017
Comments: Approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 08/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/16/2015
Comments: Conditionally approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 11/16/2015
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 11/16/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/03/2016
Comments: Approved

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/08/2016
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 2
Completed Document Type: Technical Workplan
Completed Date: 04/05/2016
Comments: Conditionally approved.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/03/2016
Comments: Approved.

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/21/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/23/2015
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/16/2015
Comments: Not reported

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/09/2017
Comments: Completed

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/25/2017
Comments: Completed

Completed Area Name: Lower Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees
Completed Date: 07/16/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cost Recovery Settlements/Decrees

CARSON MARKETPLACE LLC (Continued) **S101480945**

Completed Date: 02/04/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 02/22/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 06/22/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 12/20/2017
Comments: Meeting complete

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Cell 2
Completed Document Type: Correspondence
Completed Date: 07/19/2016
Comments: Completed and sent.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/16/2015
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/01/1990
Comments: Received

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 08/07/2015
Comments: Completed and sent.

Completed Area Name: Upper Operable Unit
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 08/20/2015
Comments: Completed

Future Area Name: Upper Operable Unit
Future Sub Area Name: Not reported
Future Document Type: Operations and Maintenance Report
Future Due Date: 2018
Future Area Name: Upper Operable Unit
Future Sub Area Name: Cell 4

CARSON MARKETPLACE LLC (Continued) **S101480945**

Future Document Type:	Design/Implementation Workplan
Future Due Date:	2021
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 3
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2022
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 1
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2025
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 4
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2021
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 2
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2020
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 4
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2022
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 5
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2024
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 3
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2023
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 2
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2021
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 1
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2024
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 1
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2024
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 5
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2023
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 2
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2020
Future Area Name:	Upper Operable Unit
Future Sub Area Name:	Cell 5
Future Document Type:	Design/Implementation Workplan
Future Due Date:	2023
Schedule Area Name:	Upper Operable Unit
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Operations and Maintenance Report

CARSON MARKETPLACE LLC (Continued) **S101480945**

Schedule Due Date: 01/14/2018
Schedule Revised Date: 06/12/2018
Schedule Area Name: Upper Operable Unit - MULTIPLE SITES
Schedule Sub Area Name: Not reported
Schedule Document Type: Remedial Action Completion Report
Schedule Due Date: 06/28/2018
Schedule Revised Date: Not reported
Schedule Area Name: Upper Operable Unit
Schedule Sub Area Name: Not reported
Schedule Document Type: Operations and Maintenance Report
Schedule Due Date: 05/16/2018
Schedule Revised Date: Not reported

SWF/LF (SWIS):
Region: STATE
Facility ID: 19-AQ-0012
Lat/Long: 33.84413 / -118.27322
Owner Name: City Of Carson
Owner Telephone: Not reported
Owner Address: Not reported
Owner Address2: 701 East Carson St
Owner City,St,Zip: Carson, CA 90749
Operational Status: Closed
Operator: Not reported
Operator Phone: Not reported
Operator Address: Not reported
Operator Address2: Not reported
Operator City,St,Zip: Not reported
Permit Date: Not reported
Permit Status: Not reported
Permitted Acreage: $0.00
Activity: Solid Waste Disposal Site
Regulation Status: Unpermitted
Landuse Name: Urban,Residential,Golf Course,Commercial
GIS Source: Map
Category: Disposal
Unit Number: 01
Inspection Frequency: Quarterly
Accepted Waste: Not reported
Closure Date: Not reported
Closure Type: Not reported
Disposal Acreage: $0.00
SWIS Num: 19-AQ-0012
Waste Discharge Requirement Num: Not reported
Program Type: Not reported
Permitted Throughput with Units: Not reported
Actual Throughput with Units: Not reported
Permitted Capacity with Units: Not reported
Remaining Capacity: Not reported
Remaining Capacity with Units: Not reported
Lat/Long: 33.84413 / -118.27322

LOS ANGELES CO. LF:
Site ID: 1889
Alt. Address: 20402 South Main Street, Carson, CA; 20300 South Main Street, Carson, CA 90745
Site Contact: Not reported

CARSON MARKETPLACE LLC (Continued) **S101480945**

Site Contact Phone:	Not reported
Site Email:	Not reported
Site Website:	Not reported
Site Type:	Designated Waste Landfill
Site SWIS Number:	19-AQ-0012
Beginning Operation Date:	Jul-59
Ending Operation Date:	1964
Local Enforcement Agency:	County Public Health
Maximun Depth Fill(Ft):	69
Permitted Capacity:	Not reported
Present Use:	Vacant
Remaining Capacity(Million):	Not reported
Status:	Closed
Waste Accepted:	Not reported
Hours of Operation:	Not reported
Disposal Area (Acre):	157

Detail As Of 01/2014:

Operator Name:	BKK Corporation (Carson)
Operator Address:	1550 127th Street
Operator City/State/Zip:	TORRANCE, CA
Operator Contact:	Ben Kazarian
Operator Telephone:	Not reported
Operator Email:	Not reported
Owner Name:	Carson Reality Project Inc. (City of Carson)
Owner Address:	701 EAST CARSON ST
Owner City/State/Zip:	Carson, CA 90745
Owner Contact:	Not reported
Owner Telephone:	Not reported
Owner Email:	Not reported

LDS:

Global Id:	T10000009325
Latitude:	33.84377
Longitude:	-118.2779
Case Type:	Land Disposal Site
Status:	Completed - Case Closed
Status Date:	09/01/2016
Lead Agency:	Not reported
Caseworker:	Not reported
Local Agency:	Not reported
RB Case Number:	64-059
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Not reported
EDR Link ID:	T10000009325
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Global Id:	T10000005544
Latitude:	33.84270
Longitude:	-118.2720

CARSON MARKETPLACE LLC (Continued) **S101480945**

Case Type:	Land Disposal Site
Status:	Completed - Case Closed
Status Date:	05/23/2016
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Caseworker:	WY
Local Agency:	Not reported
RB Case Number:	95-075
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Not reported
EDR Link ID:	T10000005544
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

CORTESE:

Region:	CORTESE
Envirostor Id:	19490019
Site/Facility Type:	STATE RESPONSE
Cleanup Status:	ACTIVE
Status Date:	04/18/1996
Site Code:	400721, 401325, 401580, 401716
Latitude:	33.842605
Longitude:	-118.27233
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	envirostor
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Haz Waste & Substances Sites

HAZNET:

envid:	S101480945
Year:	2015
GEPAID:	CAR000254037
Contact:	JAVIER WECKMANN
Telephone:	3109650137
Mailing Name:	Not reported
Mailing Address:	20400 MAIN ST
Mailing City,St,Zip:	CARSON, CA 90745
Gen County:	Los Angeles
TSD EPA ID:	AZD982441263
TSD County:	99
Waste Category:	Organic solids with halogens
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.1
Cat Decode:	Not reported

CARSON MARKETPLACE LLC (Continued) **S101480945**

Method Decode: Not reported
Facility County: Los Angeles

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: CALSI
Reg Id: 19490019

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 032716-053034
Facility Type: S4
Facility Status: Closed
Area: 22
Permit Number: 000675948
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 032716-053034
Facility Type: S4
Facility Status: Closed
Area: 22
Permit Number: 000675949
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 032716-053034
Facility Type: S4
Facility Status: Closed
Area: 22
Permit Number: 000675950
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 032716-053034
Facility Type: S4
Facility Status: Closed
Area: 22
Permit Number: 000675951
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 032716-053034
Facility Type: S4
Facility Status: Closed
Area: 22
Permit Number: 000675952
Permit Status: Closed

Region: LA

CARSON MARKETPLACE LLC (Continued) **S101480945**

Permit Category: I
Facility Id: 032716-053034
Facility Type: 02
Facility Status: Closed
Area: 22
Permit Number: 000020895
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 032716-053034
Facility Type: 02
Facility Status: Closed
Area: 22
Permit Number: 000020574
Permit Status: Closed

NPDES:

Npdes Number:	CAS000002
Facility Status:	Terminated
Agency Id:	0
Region:	4
Regulatory Measure Id:	337845
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19C349993
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	12/12/2007
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/23/2017
Discharge Name:	Carson Marketplace LLC
Discharge Address:	4350 Von Karman Ave Ste 200
Discharge City:	Newport Beach
Discharge State:	California
Discharge Zip:	92660
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported

CARSON MARKETPLACE LLC (Continued) **S101480945**

OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	337845
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C349993
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	03/23/2017
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	05/09/2008

CARSON MARKETPLACE LLC (Continued) **S101480945**

PROCESSED DATE:	12/12/2007
STATUS CODE NAME:	Terminated
STATUS DATE:	03/23/2017
PLACE SIZE:	157
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Javier Weckmann
FACILITY CONTACT TITLE:	Vice President
FACILITY CONTACT PHONE:	909-967-2504
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	javier.weckmann@tetratech.com
OPERATOR NAME:	Carson Marketplace LLC
OPERATOR ADDRESS:	4350 Von Karman Ave Ste 200
OPERATOR CITY:	Newport Beach
OPERATOR STATE:	California
OPERATOR ZIP:	92660
OPERATOR CONTACT NAME:	John Raymond
OPERATOR CONTACT TITLE:	General Manager- Director
OPERATOR CONTACT PHONE:	310-952-1773
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	JRaymond@carson.ca.us
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Carson Reclamation Authority
DEVELOPER ADDRESS:	701 E Carson Street
DEVELOPER CITY:	Carson
DEVELOPER STATE:	California
DEVELOPER ZIP:	90745
DEVELOPER CONTACT NAME:	John Raymond
DEVELOPER CONTACT TITLE:	General Manager= Director
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	N
CONSTYPE BELOW GROUND IND:	N
CONSTYPE CABLE LINE IND:	N
CONSTYPE COMM LINE IND:	N
CONSTYPE COMMERTIAL IND:	Y
CONSTYPE ELECTRICAL LINE IND:	N
CONSTYPE GAS LINE IND:	N
CONSTYPE INDUSTRIAL IND:	N
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	N
CONSTYPE RECONS IND:	N
CONSTYPE RESIDENTIAL IND:	Y
CONSTYPE TRANSPORT IND:	N
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	N
CONSTYPE WATER SEWER IND:	N
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Torrance Channel Dominquez Channel
CERTIFIER NAME:	Ric Kern
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	02-OCT-13
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

CARSON MARKETPLACE LLC (Continued) **S101480945**

CIWQS:

Agency:	Carson Marketplace LLC
Agency Address:	4350 Von Karman Ave Ste 200, Newport Beach, CA 92660
Place/Project Type:	Construction - Commercial, Residential
SIC/NAICS:	Not reported
Region:	4
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	4 19C349993
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	12/12/2007
Termination Date:	03/23/2017
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	2
Latitude:	33.84276
Longitude:	-118.27314

T95 **WERDIN DUMP** **ENVIROSTOR** **S102279529**
SW **20402 S MAIN ST** **N/A**
1/2-1 **CARSON, CA 90745**
0.651 mi.
3437 ft. **Site 3 of 3 in cluster T**

Relative: **Lower**

Actual: **26 ft.**

ENVIROSTOR:

Facility ID:	19490104
Status:	Refer: RWQCB
Status Date:	01/18/1995
Site Code:	Not reported
Site Type:	Historical
Site Type Detailed:	* Historical
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	* Mmonroy
Division Branch:	Cleanup Cypress
Assembly:	Not reported
Senate:	Not reported
Special Program:	* Site Char & Assess Grant (CERCLA 104)
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.84521
Longitude:	-118.2799
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	* HOUSEHOLD WASTES * OTHER INORGANIC SOLID WASTE
Confirmed COC:	NONE SPECIFIED

WERDIN DUMP (Continued) **S102279529**

Potential Description: NONE SPECIFIED
Alias Name: 19490104
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/15/1982
Comments: FACILITY IDENTIFIED LA CO 630 SERIES BASE COORD MAP (1973)

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/14/1982
Comments: FACILITY IDENTIFIED CO ENGR INACTIVE WASTE DISPOSAL FACILITY

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/18/1995
Comments: DATABASE VALIDATION PROGRAM CONFIRMS NFA FOR DTSC.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

96
WNW
1/2-1
0.655 mi.
3460 ft.

WILMINGTON/GRAMERCY RIGHT-OF-WAY **ENVIROSTOR** **S106568229**
BETWEEN TRANSMISSION TOWERS 1038-1050 **VCP** **N/A**
LOS ANGELES, CA 90746

Relative:
Higher

Actual:
38 ft.

ENVIROSTOR:
Facility ID: 19490245
Status: Active
Status Date: 04/25/2000
Site Code: 300837
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 18.5
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Isaac Hirbawi
Supervisor: Maryam Tasnif-Abbasi
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Funding: Responsible Party
Latitude: 33.85811
Longitude: -118.2837
APN: NONE SPECIFIED
Past Use: WASTE - INDUSTRIAL TREATMENT FACILITY
Potential COC: TPH-gas Polynuclear aromatic hydrocarbons (PAHs
Confirmed COC: 30472-NO 30025-NO
Potential Description: AQUI, SOIL, SV
Alias Name: DEPARTMENT OF WATER & POWER
Alias Type: Alternate Name
Alias Name: TOWERS 1041 TO 1048
Alias Type: Alternate Name
Alias Name: TRANSMISSION LINE RIGHT-OF-WAY
Alias Type: Alternate Name
Alias Name: WILMINGTON-GRAMERCY
Alias Type: Alternate Name
Alias Name: 110033606319
Alias Type: EPA (FRS #)
Alias Name: 300837
Alias Type: Project Code (Site Code)
Alias Name: 19490245
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 03/29/2011
Comments: Reminder letter regarding past due invoices.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/20/2015
Comments: Annual Cost Estimate completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/02/2016
Comments: FY 2016/2017 ACE completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 01/11/2018
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/23/2017
Comments: Action complete.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/14/2017

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Comments: Review completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/22/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/07/2017
Comments: Activity completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 11/14/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 03/02/2001
Comments: DTSC entered into an Amended Voluntary Cleanup Agreement (Docket No. HSA-A 99/00-081-Amendment) with LADWP to conduct a Remedial Investigation and Feasiblity Study. LADWP is to submit the Workplan to DTSC by 06/11/01.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 04/25/2000
Comments: DTSC entered into a Voluntary Cleanup Agreement (Agreement) with the Los Angeles City Department of Water and Power. The purpose of this Agreement was for DTSC to review and comment on the results of a previous investigation (Oil Sump Investigation Report dated October 1998) and to provide oversight for a Preliminary Endangerment Assessment (PEA). It was later decided that LADWP was to perform a Remedial Investigation and Feasibility Study instead of a PEA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/21/2014

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 05/24/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 04/16/2007
Comments: DTSC approved the groundwater sampling plan on April 16, 2007. They asked DWP to give them seven days notice before beginning field work.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 04/02/2008
Comments: DTSC gave DWP conditional approval of the workplan, and authorized them to proceed with the work.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 01/19/2001
Comments: DTSC approved of this workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 11/20/2002
Comments: DTSC stated that this phase of the RI was completed, but recommended that a second phase of the RI for this site be performed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 08/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 11/30/2003
Comments: DTSC accepted this workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 06/27/2001
Comments: DTSC accepted this Health and Safety Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 10/31/1998

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Comments: DTSC accepted this report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 02/24/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/11/2013
Comments: The Groundwater monitoring network at W/G ROW is being expanded.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/15/2013
Comments: The Groundwater monitoring network at W/G ROW is being expanded. A site visit was conducted in July 2013 and a project meeting was held in August 2013 to discuss the proposed expansion.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/12/2013
Comments: DTSC submitted comments on the third quarter GWMR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/13/2014
Comments: DTSC submitted comments in March 2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/13/2014
Comments: DTSC submitted comments on the Q1 2014 GW Monitoring Report and GW Installation Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/08/2014
Comments: Review completed on 10/7/2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/12/2014
Comments: DTSC reviewed and submitted comments on this report on 9/12/2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/06/2015

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Comments: Review completed - comments sent to LADWP on 2/6/15.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 02/17/2015
Comments: DTSC completed review of this report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/12/2014
Comments: DTSC submitted comments on the Final On-site CSM on 9/12/2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/12/2014
Comments: DTSC submitted comments on the Final Off-site CSM on 9/12/2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 02/20/2015
Comments: DTSC submitted comments on the Final Data Gap Work Plan on 2/20/2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 02/20/2015
Comments: DTSC submitted comments on the Final Soil Gas Work Plan on 2/20/2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/04/2014
Comments: DTSC reviewed the Tech Memo and submitted comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/08/2015
Comments: DTSC reviewed and submitted comments on the Tech Memo.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/15/2016
Comments: DTSC submitted comments on this report on March 11, 2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/15/2016
Comments: DTSC submitted comments on this report on March 11, 2016.

Completed Area Name: PROJECT WIDE

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/15/2016
Comments: DTSC submitted comments on this report on March 11, 2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2016
Comments: DTSC submitted comments on 8/5/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/21/2016
Comments: DTSC submitted comments on both GWMRs on 12/21/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/21/2016
Comments: DTSC submitted comments on both GWMRs on 12/21/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/20/2016
Comments: Action completed. The LADWP will be submitting a Draft Site Investigation/Assessment WP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/26/2010
Comments: Letter sent on 10/26/2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/25/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 05/04/2011
Comments: Second collection letter sent certified mail.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: CEQA - Initial Study/ Environmental Impact Report
Future Due Date: 2020
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2023
Future Area Name: PROJECT WIDE

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Future Sub Area Name:	Not reported
Future Document Type:	Fact Sheets
Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Public Participation Plan / Community Relations Plan
Future Due Date:	2018
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Action Plan
Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Public Notice
Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Investigation Report
Future Due Date:	2019
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Feasibility Study Report
Future Due Date:	2020
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2022
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Plan
Future Due Date:	2023
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	19490245
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	18.5
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Isaac Hirbawi
Supervisor:	Maryam Tasnif-Abbasi
Division Branch:	Cleanup Cypress
Site Code:	300837
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	04/25/2000
Restricted Use:	NO

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Funding:	Responsible Party
Lat/Long:	33.85811 / -118.2837
APN:	NONE SPECIFIED
Past Use:	WASTE - INDUSTRIAL TREATMENT FACILITY
Potential COC:	30025, 30472
Confirmed COC:	30472-NO,30025-NO
Potential Description:	AQUI, SOIL, SV
Alias Name:	DEPARTMENT OF WATER & POWER
Alias Type:	Alternate Name
Alias Name:	TOWERS 1041 TO 1048
Alias Type:	Alternate Name
Alias Name:	TRANSMISSION LINE RIGHT-OF-WAY
Alias Type:	Alternate Name
Alias Name:	WILMINGTON-GRAMERCY
Alias Type:	Alternate Name
Alias Name:	110033606319
Alias Type:	EPA (FRS #)
Alias Name:	300837
Alias Type:	Project Code (Site Code)
Alias Name:	19490245
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	03/29/2011
Comments:	Reminder letter regarding past due invoices.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/20/2015
Comments:	Annual Cost Estimate completed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/02/2016
Comments:	FY 2016/2017 ACE completed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	01/11/2018
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	05/23/2017
Comments:	Action complete.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	07/14/2017
Comments:	Review completed.

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/22/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/07/2017
Comments: Activity completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 11/14/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 03/02/2001
Comments: DTSC entered into an Amended Voluntary Cleanup Agreement (Docket No. HSA-A 99/00-081-Amendment) with LADWP to conduct a Remedial Investigation and Feasiblity Study. LADWP is to submit the Workplan to DTSC by 06/11/01.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 04/25/2000
Comments: DTSC entered into a Voluntary Cleanup Agreement (Agreement) with the Los Angeles City Department of Water and Power. The purpose of this Agreement was for DTSC to review and comment on the results of a previous investigation (Oil Sump Investigation Report dated October 1998) and to provide oversight for a Preliminary Endangerment Assessment (PEA). It was later decided that LADWP was to perform a Remedial Investigation and Feasibility Study instead of a PEA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/21/2014
Comments: Not reported

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 05/24/2007
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 04/16/2007
Comments: DTSC approved the groundwater sampling plan on April 16, 2007. They asked DWP to give them seven days notice before beginning field work.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 04/02/2008
Comments: DTSC gave DWP conditional approval of the workplan, and authorized them to proceed with the work.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 01/19/2001
Comments: DTSC approved of this workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 11/20/2002
Comments: DTSC stated that this phase of the RI was completed, but recommended that a second phase of the RI for this site be performed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Community Profile
Completed Date: 08/13/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 11/30/2003
Comments: DTSC accepted this workplan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Health & Safety Plan
Completed Date: 06/27/2001
Comments: DTSC accepted this Health and Safety Plan.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 10/31/1998
Comments: DTSC accepted this report.

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 02/24/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/11/2013
Comments: The Groundwater monitoring network at W/G ROW is being expanded.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/15/2013
Comments: The Groundwater monitoring network at W/G ROW is being expanded. A site visit was conducted in July 2013 and a project meeting was held in August 2013 to discuss the proposed expansion.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/12/2013
Comments: DTSC submitted comments on the third quarter GWMR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/13/2014
Comments: DTSC submitted comments in March 2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/13/2014
Comments: DTSC submitted comments on the Q1 2014 GW Monitoring Report and GW Installation Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/08/2014
Comments: Review completed on 10/7/2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/12/2014
Comments: DTSC reviewed and submitted comments on this report on 9/12/2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/06/2015
Comments: Review completed - comments sent to LADWP on 2/6/15.

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 02/17/2015
Comments: DTSC completed review of this report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/12/2014
Comments: DTSC submitted comments on the Final On-site CSM on 9/12/2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 09/12/2014
Comments: DTSC submitted comments on the Final Off-site CSM on 9/12/2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 02/20/2015
Comments: DTSC submitted comments on the Final Data Gap Work Plan on 2/20/2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 02/20/2015
Comments: DTSC submitted comments on the Final Soil Gas Work Plan on 2/20/2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 12/04/2014
Comments: DTSC reviewed the Tech Memo and submitted comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 07/08/2015
Comments: DTSC reviewed and submitted comments on the Tech Memo.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/15/2016
Comments: DTSC submitted comments on this report on March 11, 2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/15/2016
Comments: DTSC submitted comments on this report on March 11, 2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Completed Date: 03/15/2016
Comments: DTSC submitted comments on this report on March 11, 2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/09/2016
Comments: DTSC submitted comments on 8/5/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/21/2016
Comments: DTSC submitted comments on both GWMRs on 12/21/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/21/2016
Comments: DTSC submitted comments on both GWMRs on 12/21/2016.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/20/2016
Comments: Action completed. The LADWP will be submitting a Draft Site Investigation/Assessment WP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/26/2010
Comments: Letter sent on 10/26/2010.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/25/2009
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 05/04/2011
Comments: Second collection letter sent certified mail.

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: CEQA - Initial Study/ Environmental Impact Report
Future Due Date: 2020
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2023
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Fact Sheets

WILMINGTON/GRAMERCY RIGHT-OF-WAY (Continued) **S106568229**

Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Public Participation Plan / Community Relations Plan
Future Due Date:	2018
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Action Plan
Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Public Notice
Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Investigation Report
Future Due Date:	2019
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Feasibility Study Report
Future Due Date:	2020
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2022
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Plan
Future Due Date:	2023
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

97
SW
1/2-1
0.726 mi.
3834 ft.

GS NURSERY
20331 MAIN STREET
CARSON, CA 90745

ENVIROSTOR **S109426926**
SWF/LF **N/A**
VCP
LIENS

Relative:
Lower

Actual:
24 ft.

ENVIROSTOR:

Facility ID:	60000514
Status:	Inactive - Action Required
Status Date:	07/08/2011
Site Code:	401326
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	5.42
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Eileen Mananian
Supervisor:	Eileen Mananian
Division Branch:	Cleanup Cypress
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program

GS NURSERY (Continued) **S109426926**

Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 33.84670
Longitude: -118.2820
APN: 7336004010
Past Use: LANDFILL - CONSTRUCTION
Potential COC: Benzene DDD DDE DDT Methane TPH-diesel Bis(2-ethylhexyl)phthalate (DEHP) Butyl benzyl phthalate Chlorobenzene 1,4-Dichlorobenzene Ethylbenzene Naphthalene Isopropylbenzene (see Cumene n-Propylbenzene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes
Confirmed COC: Not reported
Potential Description: OTH, SOIL, SV, OTH, SOIL, SV
Alias Name: 7336004010
Alias Type: APN
Alias Name: 110033620776
Alias Type: EPA (FRS #)
Alias Name: 401326
Alias Type: Project Code (Site Code)
Alias Name: 60000514
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/18/2010
Comments: 2011 Cost Estimate and Schedule sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 12/12/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/16/2007
Comments: Letter for 2008 Annual Cost Estimate sent to Project Proponent.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/12/2007
Comments: Workplan accepted based on discussion of Response to Comments at 6/20 meeting. Workplan was carried out late June 2007. Final letter sent 7-12-2007.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/04/2009
Comments: PEA Report (Landfill Assessment Report - LAR) approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate

GS NURSERY (Continued) **S109426926**

Completed Date:	09/30/2009
Comments:	Cost Estimate letter sent to proponent via U.S. Mail and email
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	01/19/2010
Comments:	Second Cost Recovery Demand Letter sent by Certified mail.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Triage Meeting
Completed Date:	08/18/2015
Comments:	Triage meeting completed with OLC and Cleanup Program. Determined that VCA Termination letter will be sent to RP and NFCRA processed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	07/20/2010
Comments:	Third Cost Recovery Letter was sent to the RP via certified mail. RP was given until August 30, 2010 to respond.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	04/12/2011
Comments:	Letter sent to RP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/16/2008
Comments:	Annual Cost Estimate letter sent
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	12/14/2009
Comments:	Cost Recovery Demand Letter send certified mail.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Lien
Completed Date:	05/19/2011
Comments:	Lien filed with the County of Los Angeles on May 19, 2011. Due to failure to submit payment plan or making payments towards amount owed. Once payments are made in full, the lien will be rescinded.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported

GS NURSERY (Continued) **S109426926**

Schedule Revised Date: Not reported

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AA-1066
Lat/Long:	33.84733 / -118.281
Owner Name:	GS Brothers, Inc.
Owner Telephone:	3108331369
Owner Address:	Robert Gaudenti, President
Owner Address2:	2215 North Gaffey Street
Owner City,St,Zip:	San Padero, CA 90731
Operational Status:	Active
Operator:	GS Brothers, Inc.
Operator Phone:	3108331369
Operator Address:	Robert Gaudenti, President
Operator Address2:	2215 North Gaffey Street
Operator City,St,Zip:	San Padero, CA 90731
Permit Date:	11/02/2004
Permit Status:	Notification
Permitted Acreage:	$1.80
Activity:	Composting Operation (Green Waste)
Regulation Status:	Notification
Landuse Name:	Not reported
GIS Source:	Map
Category:	Composting
Unit Number:	01
Inspection Frequency:	Quarterly
Accepted Waste:	Green Materials
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	Not reported
SWIS Num:	19-AA-1066
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	100
Actual Throughput with Units:	Tons/day
Permitted Capacity with Units:	220000
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Tons/year
Lat/Long:	33.84733 / -118.281

LOS ANGELES CO. LF:

Site ID:	2766
Alt. Address:	N/A
Site Contact:	Not reported
Site Contact Phone:	(310) 906-7298
Site Email:	Not reported
Site Website:	http://www.gsbrothers.com/
Site Type:	Composting Facility
Site SWIS Number:	19-AA-1066
Beginning Operation Date:	N/A
Ending Operation Date:	N/A
Local Enforcement Agency:	County of Los Angeles Department of Public Health
Maximun Depth Fill(Ft):	N/A
Permitted Capacity:	100
Present Use:	Composting Operation (Green Waste)

GS NURSERY (Continued) **S109426926**

Remaining Capacity(Million):	N/A
Status:	Active
Waste Accepted:	Green Materials;
Hours of Operation:	Monday - Friday 7am-4pm
Disposal Area (Acre):	N/A

Detail As Of 01/2014:

Operator Name:	Unknown
Operator Address:	Not reported
Operator City/State/Zip:	Not reported
Operator Contact:	Not reported
Operator Telephone:	Not reported
Operator Email:	Not reported
Owner Name:	Unknown
Owner Address:	Not reported
Owner City/State/Zip:	Not reported
Owner Contact:	Not reported
Owner Telephone:	Not reported
Owner Email:	Not reported

VCP:

Facility ID:	60000514
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	5.42
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Eileen Mananian
Supervisor:	Eileen Mananian
Division Branch:	Cleanup Cypress
Site Code:	401326
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Inactive - Action Required
Status Date:	07/08/2011
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	33.84670 / -118.2820
APN:	7336004010
Past Use:	LANDFILL - CONSTRUCTION
Potential COC:	30003, 30006, 30007, 30008, 30015, 30024, 30088, 30106, 30127, 30187, 30272, 30484, 30498, 30499, 30577, 30578, 30593
Confirmed COC:	,
Potential Description:	OTH, SOIL, SV, OTH, SOIL, SV
Alias Name:	7336004010
Alias Type:	APN
Alias Name:	110033620776
Alias Type:	EPA (FRS #)
Alias Name:	401326
Alias Type:	Project Code (Site Code)
Alias Name:	60000514
Alias Type:	Envirostor ID Number

GS NURSERY (Continued) **S109426926**

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/18/2010
Comments:	2011 Cost Estimate and Schedule sent to RP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	12/12/2006
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	11/16/2007
Comments:	Letter for 2008 Annual Cost Estimate sent to Project Proponent.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	07/12/2007
Comments:	Workplan accepted based on discussion of Response to Comments at 6/20 meeting. Workplan was carried out late June 2007. Final letter sent 7-12-2007.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	03/04/2009
Comments:	PEA Report (Landfill Assessment Report - LAR) approved.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/30/2009
Comments:	Cost Estimate letter sent to proponent via U.S. Mail and email
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	01/19/2010
Comments:	Second Cost Recovery Demand Letter sent by Certified mail.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Triage Meeting
Completed Date:	08/18/2015
Comments:	Triage meeting completed with OLC and Cleanup Program. Determined that VCA Termination letter will be sent to RP and NFCRA processed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	07/20/2010
Comments:	Third Cost Recovery Letter was sent to the RP via certified mail. RP

GS NURSERY (Continued) **S109426926**

was given until August 30, 2010 to respond.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 04/12/2011
Comments: Letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/16/2008
Comments: Annual Cost Estimate letter sent

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 12/14/2009
Comments: Cost Recovery Demand Letter send certified mail.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Lien
Completed Date: 05/19/2011
Comments: Lien filed with the County of Los Angeles on May 19, 2011. Due to failure to submit payment plan or making payments towards amount owed. Once payments are made in full, the lien will be rescinded.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LIENS:
Envirostor Id: 60000514
Latitude: 33.846700
Longitude: -118.28207
Project Mgr: EILEEN MANANIAN
Project Code: 401326
If Satisfied: NO
Date Satisfied: Not reported
Site Status: INACTIVE - ACTION REQUIRED
Site Type: VOLUNTARY CLEANUP
Completed: 05/19/2011
Lien Amount: $17,270.70
Amount Remaining: Not reported
APNS: 7336004010
Description: The Site has been occupied by GS Nursery, a wholesale nursery supplier, since 1981. The Site had been undeveloped from the time that Pioneer purchased the property in 1973 through 1981 when GS Nursery began operations. Prior to 1973, the Site had been owned by several parties, including Four Corners Pipeline and Petroleum Lakes

GS NURSERY (Continued) **S109426926**

Glazer Company.

98
SW
1/2-1
0.765 mi.
4040 ft.

REBEL MINI STORAGE
20501 S. MAIN STREET
CARSON, CA 90745

ENVIROSTOR
VCP
DEED

S106568207
N/A

Relative:
Lower

Actual:
22 ft.

ENVIROSTOR:

Facility ID:	19000020
Status:	Certified / Operation & Maintenance
Status Date:	12/08/2004
Site Code:	401267
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	12.8
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Poonam Acharya
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program
Restricted Use:	YES
Site Mgmt Req:	ASP, FOUN, DAY, ELD, HOS, EX, SCH, RES
Funding:	Responsible Party
Latitude:	33.84543
Longitude:	-118.2806
APN:	7336-00-3037, 7336-00-7338, 7336-00-7339, 7336-00-7340, 7336003037, 7336003038
Past Use:	LANDFILL - DOMESTIC
Potential COC:	Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Lead Methane Barium and compounds Copper and compounds Ethylbenzene Nickel Toluene Vanadium and compounds Xylenes
Confirmed COC:	Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Lead Methane Barium and compounds Copper and compounds Ethylbenzene Nickel Toluene Vanadium and compounds Xylenes
Potential Description:	SV
Alias Name:	REBEL MINI STORAGE
Alias Type:	Alternate Name
Alias Name:	7336-00-3037
Alias Type:	APN
Alias Name:	7336-00-7338
Alias Type:	APN
Alias Name:	7336-00-7339
Alias Type:	APN
Alias Name:	7336-00-7340
Alias Type:	APN
Alias Name:	7336003037
Alias Type:	APN
Alias Name:	7336003038
Alias Type:	APN
Alias Name:	110033612794
Alias Type:	EPA (FRS #)
Alias Name:	401259
Alias Type:	Project Code (Site Code)

REBEL MINI STORAGE (Continued) **S106568207**

Alias Name: 401267
Alias Type: Project Code (Site Code)
Alias Name: 19000020
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Land Use Restriction Monitoring Report
Completed Date: 11/21/2011
Comments: Document accepted

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 06/16/2011
Comments: Collection reminder sent for past due balances on site codes 401259 & 401267.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/28/2015
Comments: Branch Chief Memo uploaded and FA was established on the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/20/2016
Comments: FY 1617 Annual Oversight Cost Estimate completed and mailed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/29/2015
Comments: FY 1516 Cost Estimate.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/04/2013
Comments: 2014 Annual Cost Estimate letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 07/17/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 02/19/2015
Comments: Comments were sent on the Report. DTSC asked to comply with AQMD Rule and submit a new O&M Plan for site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

REBEL MINI STORAGE (Continued) **S106568207**

Completed Document Type: * Land Use Restriction Monitoring Report
Completed Date: 02/01/2016
Comments: Report was conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 08/31/2017
Comments: Report was approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/25/2012
Comments: 2013 Annual Cost Estimate letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/05/2017
Comments: 1718 Cost Estimate finalized.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 08/09/2004
Comments: DTSC entered into A Voluntary Cleanup Agreement (VCA) with the Dewey group for the Rebel Mini Storage Site. The purpose of the agreement is for DTSC to make a determination as to whether the site is suitable for its present use and whether additional sampling is necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 11/29/2004
Comments: DTSC completed a Preliminary Endangerment Assessment for the Rebel Mini Storage Site. On 11/29/2004 a Conditional No Further Action was issued with the condition that (1) the present use of the site does not change from that of a storage facility; (2) the use of the Site not be changed from its present use without prior written approval from DTSC; and (3) a land use convenant/deed restriction approved by DTSC is recorded for the Site. In addition, on 11/29/04 an Operation and Maintenance Agreement was entered into by and between DTSC and Carson Storage Venture, LP, for the Rebel Mini Storage Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 12/08/2004
Comments: A Deed Restriction was recorded in the Los Angeles County Recorder's office on 12/08/2004 for the Rebel Mini Storage Site. The property is restricted to use as a self storage facility.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand

REBEL MINI STORAGE (Continued) **S106568207**

Completed Date: 07/19/2011
Comments: Second collection letter sent certified mail.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 12/04/2013
Comments: Monitoring report was received and reviewed. No comments were made and document was approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/20/2010
Comments: 2011 Cost Estimate and Schedule sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 01/20/2006
Comments: Site Visit was conducted on January 20, 2006. Advised RP to conduct methane monitoring throughout the year not only for annual O&M Report.
Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 11/29/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 02/22/2006
Comments: Letter was sent to RP, accepting O&M Report and Repair certification.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 12/20/2006
Comments: Annual Methane Monitoring Report approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 01/03/2008
Comments: Report approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 11/21/2008
Comments: Annual Inspection Report received and accepted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports

REBEL MINI STORAGE (Continued) **S106568207**

Completed Date:	01/07/2013
Comments:	Document Completed and accepted
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Financial Assurance Documentation
Completed Date:	07/29/2015
Comments:	FA was established for the project.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction - Site Inspection/Visit
Completed Date:	12/24/2008
Comments:	Deed Restriction Inpsection Report Completed. Next inpsection due to be completed during 2009-2010 fiscal year.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Land Use Restriction Monitoring Report
Completed Date:	12/29/2009
Comments:	Document accepted for the 2009-2010 FY Annual Inspection Report.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/30/2011
Comments:	2012 Annual Cost Estimate letter sent to RP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Land Use Restriction Monitoring Report
Completed Date:	11/22/2010
Comments:	Document reviewed and approved. Letter sent to RP.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/30/2009
Comments:	Cost Estimate letter sent to proponent via U.S. Mail
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Report
Future Due Date:	2019
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	5 Year Review Reports
Schedule Due Date:	03/05/2018
Schedule Revised Date:	Not reported

VCP:

Facility ID:	19000020
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	ASP, FOUN, DAY, ELD, HOS, EX, SCH, RES
Acres:	12.8
National Priorities List:	NO

REBEL MINI STORAGE (Continued) **S106568207**

Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Poonam Acharya
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	401267
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Certified / Operation & Maintenance
Status Date:	12/08/2004
Restricted Use:	YES
Funding:	Responsible Party
Lat/Long:	33.84543 / -118.2806
APN:	7336-00-3037, 7336-00-7338, 7336-00-7339, 7336-00-7340, 7336003037, 7336003038
Past Use:	LANDFILL - DOMESTIC
Potential COC:	30001, 30003, 30005, 30013, 30015, 30067, 30156, 30272, 30407, 30550, 30587, 30593
Confirmed COC:	30001,30003,30005,30013,30015,30067,30156,30272,30407,30550,30587, 30593
Potential Description:	SV
Alias Name:	REBEL MINI STORAGE
Alias Type:	Alternate Name
Alias Name:	7336-00-3037
Alias Type:	APN
Alias Name:	7336-00-7338
Alias Type:	APN
Alias Name:	7336-00-7339
Alias Type:	APN
Alias Name:	7336-00-7340
Alias Type:	APN
Alias Name:	7336003037
Alias Type:	APN
Alias Name:	7336003038
Alias Type:	APN
Alias Name:	110033612794
Alias Type:	EPA (FRS #)
Alias Name:	401259
Alias Type:	Project Code (Site Code)
Alias Name:	401267
Alias Type:	Project Code (Site Code)
Alias Name:	19000020
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Land Use Restriction Monitoring Report
Completed Date:	11/21/2011
Comments:	Document accepted
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	06/16/2011
Comments:	Collection reminder sent for past due balances on site codes 401259 &

REBEL MINI STORAGE (Continued) **S106568207**

401267.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/28/2015
Comments: Branch Chief Memo uploaded and FA was established on the project.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/20/2016
Comments: FY 1617 Annual Oversight Cost Estimate completed and mailed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/29/2015
Comments: FY 1516 Cost Estimate.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/04/2013
Comments: 2014 Annual Cost Estimate letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 07/17/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 02/19/2015
Comments: Comments were sent on the Report. DTSC asked to comply with AQMD Rule and submit a new O&M Plan for site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Land Use Restriction Monitoring Report
Completed Date: 02/01/2016
Comments: Report was conditionally approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 08/31/2017
Comments: Report was approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/25/2012
Comments: 2013 Annual Cost Estimate letter sent to RP.

REBEL MINI STORAGE (Continued) **S106568207**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/05/2017
Comments: 1718 Cost Estimate finalized.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 08/09/2004
Comments: DTSC entered into A Voluntary Cleanup Agreement (VCA) with the Dewey group for the Rebel Mini Storage Site. The purpose of the agreement is for DTSC to make a determination as to whether the site is suitable for its present use and whether additional sampling is necessary.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Operation & Maintenance Order/Agreement
Completed Date: 11/29/2004
Comments: DTSC completed a Preliminary Endangerment Assessment for the Rebel Mini Storage Site. On 11/29/2004 a Conditional No Further Action was issued with the condition that (1) the present use of the site does not change from that of a storage facility; (2) the use of the Site not be changed from its present use without prior written approval from DTSC; and (3) a land use convenant/deed restriction approved by DTSC is recorded for the Site. In addition, on 11/29/04 an Operation and Maintenance Agreement was entered into by and between DTSC and Carson Storage Venture, LP, for the Rebel Mini Storage Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 12/08/2004
Comments: A Deed Restriction was recorded in the Los Angeles County Recorder's office on 12/08/2004 for the Rebel Mini Storage Site. The property is restricted to use as a self storage facility.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 07/19/2011
Comments: Second collection letter sent certified mail.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction - Site Inspection/Visit
Completed Date: 12/04/2013
Comments: Monitoring report was received and reviewed. No comments were made and document was approved.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/20/2010
Comments: 2011 Cost Estimate and Schedule sent to RP.

REBEL MINI STORAGE (Continued) **S106568207**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	01/20/2006
Comments:	Site Visit was conducted on January 20, 2006. Advised RP to conduct methane monitoring throughout the year not only for annual O&M Report. Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	11/29/2004
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	02/22/2006
Comments:	Letter was sent to RP, accepting O&M Report and Repair certification.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	12/20/2006
Comments:	Annual Methane Monitoring Report approved.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	01/03/2008
Comments:	Report approved.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	11/21/2008
Comments:	Annual Inspection Report received and accepted.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	5 Year Review Reports
Completed Date:	01/07/2013
Comments:	Document Completed and accepted

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Financial Assurance Documentation
Completed Date:	07/29/2015
Comments:	FA was established for the project.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction - Site Inspection/Visit
Completed Date:	12/24/2008
Comments:	Deed Restriction Inpsection Report Completed. Next inpsection due to be completed during 2009-2010 fiscal year.

REBEL MINI STORAGE (Continued) **S106568207**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Land Use Restriction Monitoring Report
Completed Date: 12/29/2009
Comments: Document accepted for the 2009-2010 FY Annual Inspection Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/30/2011
Comments: 2012 Annual Cost Estimate letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Land Use Restriction Monitoring Report
Completed Date: 11/22/2010
Comments: Document reviewed and approved. Letter sent to RP.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/30/2009
Comments: Cost Estimate letter sent to proponent via U.S. Mail

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Operations and Maintenance Report
Future Due Date: 2019
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: 5 Year Review Reports
Schedule Due Date: 03/05/2018
Schedule Revised Date: Not reported

DEED:
Envirostor ID: 19000020
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: VOLUNTARY CLEANUP
Status: CERTIFIED / OPERATION & MAINTENANCE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): 12/08/2004
File Name: Envirostor Land Use Restrictions

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99 West 1/2-1 0.799 mi. 4217 ft.

FIRST IMAGE MANAGEMENT CO.
19701 S. HAMILTON AVENUE #130
TORRANCE, CA 90508

ENVIROSTOR **S110493842**
N/A

Relative: Higher

Actual: 27 ft.

ENVIROSTOR:
Facility ID: 71003267
Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit

FIRST IMAGE MANAGEMENT CO. (Continued) **S110493842**

Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Chatsworth
Assembly: Not reported
Senate: Not reported
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.85174
Longitude: -118.2873
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAL000060870
Alias Type: EPA Identification Number
Alias Name: 71003267
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

U100 **WESTERN CONCRETE STRUCTURE, INC** **ENVIROSTOR** **S103948957**
West **19113 SOUTH HAMILTON AVENUE** **N/A**
1/2-1 **GARDENA, CA 90248**
0.802 mi.
4237 ft. **Site 1 of 2 in cluster U**

Relative:
Higher

Actual:
32 ft.

ENVIROSTOR:
Facility ID: 19320133
Status: Refer: Other Agency
Status Date: 10/27/1994
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO

WESTERN CONCRETE STRUCTURE, INC (Continued) **S103948957**

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: * Site Char & Assess Grant (CERCLA 104)
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.85687
Longitude: -118.2865
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: * Metals - Other Inorganic Solid Waste * UNSPECIFIED AQUEOUS SOLUTION * UNSPECIFIED SOLVENT MIXTURES * WASTE OIL & MIXED OIL
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD008799231
Alias Type: EPA Identification Number
Alias Name: 19320133
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 01/06/1983
Comments: FACILITY IDENTIFIED LA CHAM OF COMM BUS DIR 1971-72 MANUFACTURER OF CONCRETE PRODUCTS

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/27/1994
Comments: Site screening/file search concludes NFA for DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 04/01/1985
Comments: WASTE OIL IS DISP OF IN PLASTIC LINED DRUMS & PLACED IN THE DUMPSTER(PICKED BY WESTERN REFUSE OF GARDEN), METAL SHAVING ARE SOLD AS SCRAP. ASP SURVEY 6/83 & T/C W/ C.SPIEVAK,WEST-ERN,1/4/85,213-321-1571 - SOURCE ACT: POST TENSIONING MATLS MFG & INSTALLATION -100%. SOLUBLE OIL USED. YR OF OERP:1957 -PRESENT SUBMIT TO EPA PRELIM ASSESS DONE CERCLA 104

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

U101 **RUBBER TECK INC** **SEMS-ARCHIVE** **1000162622**
West **19115 S HAMILTON ST** **RCRA-SQG** **CAD008489023**
1/2-1 **GARDENA, CA 90248** **ENVIROSTOR**
0.820 mi. **HIST CORTESE**
4332 ft. **Site 2 of 2 in cluster U** **LOS ANGELES CO. HMS**

Relative:
Higher

Actual:
31 ft.

SEMS Archive:

Site ID:	901110
EPA ID:	CAD008489023
Cong District:	31
FIPS Code:	6037
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	9
Site ID:	901110
EPA ID:	CAD008489023
Site Name:	RUBBER TECK INC
NPL:	N
FF:	N
OU:	0
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1988-02-01 00:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	9
Site ID:	901110
EPA ID:	CAD008489023
Site Name:	RUBBER TECK INC
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1988-02-01 00:00:00
Qual:	N
Current Action Lead:	EPA Perf

Region:	9
Site ID:	901110
EPA ID:	CAD008489023
Site Name:	RUBBER TECK INC
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	2
Start Date:	1985-07-01 00:00:00
Finish Date:	1986-02-01 00:00:00
Qual:	L
Current Action Lead:	St Perf

RUBBER TECK INC (Continued) **1000162622**

Region:	9
Site ID:	901110
EPA ID:	CAD008489023
Site Name:	RUBBER TECK INC
NPL:	N
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1985-07-01 00:00:00
Finish Date:	1985-07-01 00:00:00
Qual:	Not reported
Current Action Lead:	St Perf

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	RUBBER TECK INC
Facility address:	19115 S HAMILTON GARDENA, CA 90248
EPA ID:	CAD008489023
Mailing address:	S HAMILTON GARDENA, CA 90248
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PAUL KARRES PRES OTTO GRASS V PRES
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported

RUBBER TECK INC (Continued) **1000162622**

Owner/operator telephone: 415-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

ENVIROSTOR:
Facility ID: 19300025
Status: Refer: Other Agency
Status Date: 04/25/1995
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.85760
Longitude: -118.2880
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: * HALOGENATED SOLVENTS * HYDROCARBON SOLVENTS * OXYGENATED SOLVENTS * AQUEOUS SOLUTION WITH TOTAL ORGANIC RESIDUES >= 10 * DETERGENT & SOAP * WASTE OIL & MIXED OIL
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED

RUBBER TECK INC (Continued) **1000162622**

Alias Name: CAD008489023
Alias Type: EPA Identification Number
Alias Name: 19300025
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 03/09/1982
Comments: FACILITY IDENTIFIED LA CHAM OF COMM BUS DIR 1963 MFG, CONNECTORS, SEALS

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/25/1995
Comments: NOV CEASE DISCH OF WASTEWATER TO UNDER-G DISP SYSTEM. SUBMIT TO EPA PRELIM ASSESS DONE CERCLA 104 SITE SCREENING DONE REASSESSMENT OF PA DONE BY E&E RECOMMENDS NFA UNDER CERCLA DUE TO LOW ROUTE CHARACTERISTICS VALUE AND LOW WASTE TOXICITY/PERSISTENCE VALUE. NFA FOR DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/18/1995
Comments: DATABASE VALIDATION PROGRAM CONFIRMS NFA FOR DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/08/1988
Comments: SITE SCREENING DONE DHS WILL CONDUCT A SI(LOW) TO ASSESS SOIL CONTAMINATION

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/27/1988
Comments: SITE SCREENING DONE REASSESSMENT OF PA DONE BY E&E RECOMMENDS NFA UNDER CERCLA DUE TO LOW ROUTE CHARACTERISTICS VALUE AND LOW WASTE TOXICITY/PERSISTENCE VALUE

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 04/01/1985
Comments: HAULER: OIL EMULSIONS BY OIL & PUMPING; MEK BY OIL & SOLVENT PROCESS CO; WASTES IN CESSPOOL BY J.W.P.C.P. ASP 6/4/82- 1)SOURCE ACT: MOLDED RUBBER PRODS,DUCT CONNECTORS, SEALING DEVICES - FOR AIRCRAFT & MISSILE INDUST. 2)YR OF OPER: 1947 TO PRESENT ENF HISTORY: 3/14/78 LACE PLAN CORRECTOR BRICK-LINED CESSOPOOL UNACCEPTABLE. 8/72 LACE. NOV-CEASE DISCH OF WASTEWATER TO UNDER-G DISP SYSTEM. SUBMIT TO EPA PRELIM ASSESS DONE CERCLA 104

Future Area Name: Not reported
Future Sub Area Name: Not reported

RUBBER TECK INC (Continued) **1000162622**

Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: CALSI
Reg Id: 19300025

LOS ANGELES CO. HMS:
Region: LA
Permit Category: T
Facility Id: 001841-001916
Facility Type: 0
Facility Status: Removed
Area: 2
Permit Number: 00006294T
Permit Status: Removed

Region: LA
Permit Category: I
Facility Id: 001841-I01916
Facility Type: 09
Facility Status: Closed
Area: 2
Permit Number: 000008203
Permit Status: Closed

102
SE
1/2-1
0.842 mi.
4445 ft.

GARDENA VALLEY LANDFILL NO. 6 **ENVIROSTOR** **S105960474**
CHICO AND DOMINGUEZ STREET **VCP** **N/A**
CARSON, CA 90746 **CA BOND EXP. PLAN**

Relative:
Lower

Actual:
18 ft.

ENVIROSTOR:
Facility ID: 19490105
Status: Active
Status Date: 11/01/2004
Site Code: 401269
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 16
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Daniel Zogaib
Supervisor: Emad Yemut
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 64
Senate: 35
Special Program: Voluntary Cleanup Program
Restricted Use: NO

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 33.84055
Longitude: -118.2572
APN: NONE SPECIFIED
Past Use: LANDFILL - DOMESTIC
Potential COC: Lead Chromium VI
Confirmed COC: NONE SPECIFIED
Potential Description: OTH, SOIL
Alias Name: 110033619671
Alias Type: EPA (FRS #)
Alias Name: P43068
Alias Type: PCode
Alias Name: 300069
Alias Type: Project Code (Site Code)
Alias Name: 400069
Alias Type: Project Code (Site Code)
Alias Name: 401269
Alias Type: Project Code (Site Code)
Alias Name: 19490105
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 03/02/2011
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 06/23/2010
Comments: Collection letter sent for unpaid invoice balances.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/17/2016
Comments: Annual Cost Estimate sent to RP.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 10/28/2011
Comments: Collection reminder letter sent for unpaid past due invoice balances.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 11/28/2011
Comments: Second request for unpaid invoice balances sent certified mail (invoices 10SM0439, 10SM1630, 10SM3059, 11SM0139).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/29/2017

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 05/04/2011
Comments: Second Collection letter sent certified mail.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 11/01/2004
Comments: DTSC entered into a Voluntary Cleanup Agreement with Inter Group Investment, LLC to provide oversight for a limited Removal Action at the northern 9-acre portion of the Fomer Landfill.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/15/1982
Comments: FACILITY IDENTIFIED LA CO 630 SERIES BASE COORD MAP (1973)

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/15/2007
Comments: Sent letter to RP's lawyer on November 15, 2007 via both email and US Mail.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/29/2005
Comments: Workplan was found to be acceptable. we are now waiting for them to implement it.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/01/2009
Comments: Annual Cost Estimation letter sent.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/25/2013
Comments: Completed

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/09/2014
Comments: Cost estimate letter mailed to RP on 09/10/14.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Form 1479 - Site and Collections Summary

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Completed Date: 02/19/2014
Comments: 1479 Completed.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/02/2008
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 03/02/2011
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 05/19/2011
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 07/25/2011
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 03/28/2014
Comments: Completed

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 07/28/2014
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 11/17/2010
Comments: Final request for unpaid invoice balances sent certified mail.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 09/16/2010
Comments: First collection letter sent for outstanding balances on invoices 09SM1978 & 09SM3186.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 03/25/2011
Comments: Reminder of unpaid past due invoice balances: 09SM3186, 10SM0439,

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

10SM1630

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/30/2015
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 03/19/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 06/23/2016
Comments: Approved

Completed Area Name: Operable Unit 1 (OU1)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/26/2016
Comments: Completed. No letter required as CQA Report will be part of landfill cap RACR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 05/31/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/17/2017
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 08/24/2010
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 10/18/2010
Comments: Second Collection letter sent for outstanding balances on invoice #09SM1978 and 09SM3186.

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Completed Area Name:	Operable Unit 2 (OU2)
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	07/23/2010
Comments:	2nd Request for payment of invoices sent.
Completed Area Name:	Operable Unit 2 (OU2)
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	07/26/2011
Comments:	Not reported
Completed Area Name:	Operable Unit 2 (OU2)
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	06/16/2011
Comments:	Collection reminder letter sent.
Completed Area Name:	Operable Unit 2 (OU2)
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	08/29/2011
Comments:	Final demand letter sent certified mail.
Future Area Name:	Operable Unit 1 (OU1)
Future Sub Area Name:	Not reported
Future Document Type:	Remedial Action Completion Report
Future Due Date:	2018
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Remedy Constructed: Operating Properly & Successfully
Future Due Date:	2022
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	19490105
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	16
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Daniel Zogaib
Supervisor:	Emad Yemut
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	401269
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	11/01/2004

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Restricted Use: NO
Funding: Responsible Party
Lat/Long: 33.84055 / -118.2572
APN: NONE SPECIFIED
Past Use: LANDFILL - DOMESTIC
Potential COC: 30013, 30153
Confirmed COC: NONE SPECIFIED
Potential Description: OTH, SOIL
Alias Name: 110033619671
Alias Type: EPA (FRS #)
Alias Name: P43068
Alias Type: PCode
Alias Name: 300069
Alias Type: Project Code (Site Code)
Alias Name: 400069
Alias Type: Project Code (Site Code)
Alias Name: 401269
Alias Type: Project Code (Site Code)
Alias Name: 19490105
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: CEQA - Initial Study/ Neg. Declaration
Completed Date: 03/02/2011
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 06/23/2010
Comments: Collection letter sent for unpaid invoice balances.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/17/2016
Comments: Annual Cost Estimate sent to RP.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 10/28/2011
Comments: Collection reminder letter sent for unpaid past due invoice balances.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 11/28/2011
Comments: Second request for unpaid invoice balances sent certified mail (invoices 10SM0439, 10SM1630, 10SM3059, 11SM0139).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/29/2017
Comments: Not reported

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 05/04/2011
Comments: Second Collection letter sent certified mail.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 11/01/2004
Comments: DTSC entered into a Voluntary Cleanup Agreement with Inter Group Investment, LLC to provide oversight for a limited Removal Action at the northern 9-acre portion of the Fomer Landfill.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 04/15/1982
Comments: FACILITY IDENTIFIED LA CO 630 SERIES BASE COORD MAP (1973)

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/15/2007
Comments: Sent letter to RP's lawyer on November 15, 2007 via both email and US Mail.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/29/2005
Comments: Workplan was found to be acceptable. we are now waiting for them to implement it.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/01/2009
Comments: Annual Cost Estimation letter sent.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/25/2013
Comments: Completed

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/09/2014
Comments: Cost estimate letter mailed to RP on 09/10/14.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Form 1479 - Site and Collections Summary
Completed Date: 02/19/2014
Comments: 1479 Completed.

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Design - Preliminary/Intermediate
Completed Date: 06/02/2008
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 03/02/2011
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 05/19/2011
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 07/25/2011
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Well Decommissioning Workplan
Completed Date: 03/28/2014
Comments: Completed

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 07/28/2014
Comments: Approved

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 11/17/2010
Comments: Final request for unpaid invoice balances sent certified mail.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 09/16/2010
Comments: First collection letter sent for outstanding balances on invoices 09SM1978 & 09SM3186.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 03/25/2011
Comments: Reminder of unpaid past due invoice balances: 09SM3186, 10SM0439, 10SM1630

Completed Area Name: PROJECT WIDE

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 11/30/2015
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 03/19/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/30/2015
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Design
Completed Date: 06/23/2016
Comments: Approved

Completed Area Name: Operable Unit 1 (OU1)
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/26/2016
Comments: Completed. No letter required as CQA Report will be part of landfill cap RACR.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 05/31/2016
Comments: Approved

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/17/2017
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 08/24/2010
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 10/18/2010
Comments: Second Collection letter sent for outstanding balances on invoice #09SM1978 and 09SM3186.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

Completed Document Type: Letter - Demand
Completed Date: 07/23/2010
Comments: 2nd Request for payment of invoices sent.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 07/26/2011
Comments: Not reported

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 06/16/2011
Comments: Collection reminder letter sent.

Completed Area Name: Operable Unit 2 (OU2)
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 08/29/2011
Comments: Final demand letter sent certified mail.

Future Area Name: Operable Unit 1 (OU1)
Future Sub Area Name: Not reported
Future Document Type: Remedial Action Completion Report
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Remedy Constructed: Operating Properly & Successfully
Future Due Date: 2022
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CA BOND EXP. PLAN:
Reponsible Party: BACKLOG SITE CLEANUP PLANNING REPORT
Project Revenue Source Company: Not reported
Project Revenue Source Addr: Not reported
Project Revenue Source City,St,Zip: Not reported
Project Revenue Source Desc: This site is projected for cleanup funded by responsible parties with reimbursement to DHS for staff and related costs. However, if the responsible parties fail to provide funding for the cleanup another source of funds will need to be established.
Site Description: The site encompasses an area of approximately six acres. The site was used for disposal of household and commercial wastes from November of 1962 through April of 1965.
Hazardous Waste Desc: The fill contains numerous hazardous wastes derived from households and commercial uses. Methane has been detected in the fill at the facility. The fill depth ranges from 35 to 40 feet over the site. Ground water was not encountered at depths of 30 to 40 feet below ground surface.
Threat To Public Health & Env: The landfill is suspected of containing hazardous wastes in addition to the methane gas hazard. Efforts are being made by private parties to characterize this site and assess the potential hazards present. The landfill gas and ground water contamination are of primary concern.
Site Activity Status: The responsible party is conducting a remedial investigation and a feasibility

GARDENA VALLEY LANDFILL NO. 6 (Continued) **S105960474**

study with minimal DHS participation.

103
SW
1/2-1
0.878 mi.
4634 ft.

GARDENA VALLEY LANDFILL 1 & 2
BTW DEL AMO,TORRANCE,MAIN,FIGUEROA ST
CARSON, CA 90745

ENVIROSTOR
VCP
HIST Cal-Sites
DEED

S101272751
N/A

Relative:
Lower

Actual:
25 ft.

ENVIROSTOR:

Facility ID:	19490203
Status:	Certified O&M - Land Use Restrictions Only
Status Date:	04/28/1989
Site Code:	401767
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	14.5
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Safouh Sayed
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Assembly:	64
Senate:	35
Special Program:	Voluntary Cleanup Program
Restricted Use:	YES
Site Mgmt Req:	REM, DAY, ELD, HOS, LUC, EX, NDEV, NSUB, SCH, RES
Funding:	Responsible Party
Latitude:	33.8434
Longitude:	-118.2819
APN:	NONE SPECIFIED
Past Use:	LANDFILL - HAZARDOUS WASTE
Potential COC:	* HOUSEHOLD WASTES * Pesticides - Wastes From Production * CONTAMINATED SOIL * Sludge - Paint
Confirmed COC:	NONE SPECIFIED
Potential Description:	OTH, SOIL
Alias Name:	GARDENA VALLEY SOILS
Alias Type:	Alternate Name
Alias Name:	110033619662
Alias Type:	EPA (FRS #)
Alias Name:	300068
Alias Type:	Site Code - Historical
Alias Name:	P42019
Alias Type:	PCode
Alias Name:	300068
Alias Type:	Project Code (Site Code)
Alias Name:	400068
Alias Type:	Project Code (Site Code)
Alias Name:	401400
Alias Type:	Project Code (Site Code)
Alias Name:	401767
Alias Type:	Project Code (Site Code)
Alias Name:	19490203
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Completed Document Type: Reimbursement Agreement
Completed Date: 02/01/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 12/18/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 04/30/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 04/28/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 05/13/2009
Comments: Proponent requested that Reimbursement Agreement be terminated. Closeout Memo issued to Cost Recovery.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 06/19/2008
Comments: A Reimbursement Agreement for consultative services with the SM Coyne Company was fully executed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Remedial or Removal Design
Completed Date: 06/28/1999
Comments: Approval of Remedial Design. The Remedial Design consists of five major tasks: site cleaning and grubbing, earthwork, grading, cap construction, stormwater conveyance system, landfill gas collection and treament system.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 06/30/1992
Comments: Not reported

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	09/10/1991
Comments:	Approval of Wastefill FS Report sent to RPs.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	01/30/1990
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	10/01/2017
Comments:	Not reported

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	19490203
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	REM, DAY, ELD, HOS, LUC, EX, NDEV, NSUB, SCH, RES
Acres:	14.5
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Safouh Sayed
Supervisor:	Robert Senga
Division Branch:	Cleanup Cypress
Site Code:	401767
Assembly:	64
Senate:	35
Special Programs Code:	Voluntary Cleanup Program
Status:	Certified O&M - Land Use Restrictions Only
Status Date:	04/28/1989
Restricted Use:	YES
Funding:	Responsible Party
Lat/Long:	33.8434 / -118.2819
APN:	NONE SPECIFIED
Past Use:	LANDFILL - HAZARDOUS WASTE
Potential COC:	10008, 10077, 10097, 10179
Confirmed COC:	NONE SPECIFIED
Potential Description:	OTH, SOIL
Alias Name:	GARDENA VALLEY SOILS
Alias Type:	Alternate Name

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Alias Name: 110033619662
Alias Type: EPA (FRS #)
Alias Name: 300068
Alias Type: Site Code - Historical
Alias Name: P42019
Alias Type: PCode
Alias Name: 300068
Alias Type: Project Code (Site Code)
Alias Name: 400068
Alias Type: Project Code (Site Code)
Alias Name: 401400
Alias Type: Project Code (Site Code)
Alias Name: 401767
Alias Type: Project Code (Site Code)
Alias Name: 19490203
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement
Completed Date: 02/01/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 12/18/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 04/30/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 04/28/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 05/13/2009
Comments: Proponent requested that Reimbursement Agreement be terminated. Closeout Memo issued to Cost Recovery.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Reimbursement Agreement

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Completed Date:	06/19/2008
Comments:	A Reimbursement Agreement for consultative services with the SM Coyne Company was fully executed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Remedial or Removal Design
Completed Date:	06/28/1999
Comments:	Approval of Remedial Design. The Remedial Design consists of five major tasks: site cleaning and grubbing, earthwork, grading, cap construction, stormwater conveyance system, landfill gas collection and treament system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	06/30/1992
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	09/10/1991
Comments:	Approval of Wastefill FS Report sent to RPs.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	01/30/1990
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	10/01/2017
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Calsite:

Region:	CYPRESS
Facility ID:	19490203
Facility Type:	STATE
Type:	STATE FUNDED SITE
Branch:	SB
Branch Name:	SO CAL - CYPRESS
File Name:	Not reported
State Senate District:	03041998
Status:	ANNUAL WORKPLAN (AWP) - ACTIVE SITE

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	DEPT OF TOXIC SUBSTANCES CONTROL
NPL:	Not Listed
SIC Code:	49
SIC Name:	ELECTRIC, GAS & SANITARY SERVICES
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	SSAYED
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	LA
Region Water Control Board Name:	LOS ANGELES
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	55
State Senate District Code:	28
Facility ID:	19490203
Activity:	DEED
Activity Name:	DEED RESTRICTIONS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04281989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	AGREE
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01301990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09101991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	A MOD
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Comments Date:	09141994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19490203
Activity:	DES
Activity Name:	DESIGN
AWP Code:	SOIL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06281999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	BTW DEL AMO,TORRANCE,MAIN,FIGUEROA ST
Alternate City,St,Zip:	CARSON, CA 90745
Background Info:	The site project consists of a portion of adjacent, former former Class II landfills. The landfills were permitted to receive industrial and municipal wastes and operated from November 1956, to October 1959. These landfills accepted 635,500 cubic yards of soil and wastes. The wastes were approximately 75 percent residential refuse and 25 percent other wastes, including liquid industrial waste. Sample results show that metals, chlorinated solvents, petroleum constituents, DDT and vinyl chloride are present. Methane gas escaping via the soil surface may pose a fire and explosion hazard for proposed commercial development unless gas is controlled. Other subsurface gases contain contaminants including vinyl chloride, chlorinated solvents

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

and petroleum constituents. A mobile home park, church, and retail businesses border the site, which is fenced. The effect of the landfill on groundwater is currently being investigated.
The Department entered into an agreement with the RPs in April 1989. Two interim RI reports have been submitted by the RPs. Based on the Department's review of these reports, additional groundwater investigation was ordered.

Comments Date: 01011985
Comments: Self-Monitoring: Sample plan approved by DHS.
Comments Date: 05011985
Comments: Sample Results: One sampling point from top 12" of fill
Comments Date: 05011985
Comments: contained concentrations of 4,4-DDT in excess of state
Comments Date: 05011985
Comments: standards. No carcinogens were found. Waste passed the PH
Comments Date: 05011985
Comments: criteria non-corrosive. Site does generate landfill gas,
Comments Date: 05011985
Comments: 1544 pounds/day.
Comments Date: 06281999
Comments: Approval of Remedial Design. The Remedial Design consists of
Comments Date: 06281999
Comments: five major tasks: site cleaning and grubbing, earthwork,
Comments Date: 06281999
Comments: grading, cap construction, stormwater conveyance system,
Comments Date: 06281999
Comments: landfill gas collection and treament system.
Comments Date: 06281999
Comments: Not reported
Comments Date: 07251991
Comments: Landfill. Contaminants include metals, chlorinated solvents,
Comments Date: 07251991
Comments: benzene, petroleum constituents, DDT, and vinyl chloride.
Comments Date: 07251991
Comments: Site is located in the block bounded by Del Amo Blvd,
Comments Date: 07251991
Comments: Torrance Blvd, Main St, and Figueroa St.
Comments Date: 09101991
Comments: Approval of Wastefill FS Report sent to RPs.
Comments Date: 12301987
Comments: Hazard Ranking completed. Score 14.16 sent to BEP. HQ
Comments Date: 12301987
Comments: received 07/07/87. Two-hundred drums of paint sludge buried.
ID Name: CALSTARS CODE
ID Value: 400068
ID Name: BEP DATABASE PCODE
ID Value: P42019
Alternate Name: GARDENA VALLEY LANDFILL 1 & 2
Alternate Name: GARDENA VALLEY SOILS
Alternate Name: Not reported
Special Programs Code: Not reported
Special Programs Name: Not reported

DEED:
Envirostor ID: 19490203
Area: PROJECT WIDE

GARDENA VALLEY LANDFILL 1 & 2 (Continued) **S101272751**

Sub Area: Not reported
Site Type: VOLUNTARY CLEANUP
Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): 04/28/1989
File Name: Envirostor Land Use Restrictions

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104 **ROBERTS COMPANY** **ENVIROSTOR** **S109548378**
NW **550 PATRICE PLACE** **N/A**
1/2-1 **GARDENA, CA 90248**
0.919 mi.
4850 ft.

Relative:
Higher

Actual:
28 ft.

ENVIROSTOR:
Facility ID: 60001105
Status: No Further Action
Status Date: 11/09/2010
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1.8
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Eileen Mananian
Division Branch: Cleanup Cypress
Assembly: 64
Senate: 35
Special Program: EPA - PASI
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: EPA Grant
Latitude: 33.86615
Longitude: -118.2825
APN: NONE SPECIFIED
Past Use: MANUFACTURING - OTHER
Potential COC: Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE Copper and compounds
Confirmed COC: Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE Copper and compounds
Potential Description: SV
Alias Name: 60001105
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Site Screening
Completed Date: 04/10/2009
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported

ROBERTS COMPANY (Continued) **S109548378**

Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

105
NNW
1/2-1
0.949 mi.
5013 ft.

PRIME WHEEL CORP
17705 S MAIN ST
GARDENA, CA 90248

ENVIROSTOR **S105422038**
LOS ANGELES CO. HMS **N/A**
NPDES
WDS
CIWQS

Relative:
Lower

Actual:
24 ft.

ENVIROSTOR:
Facility ID: 71003444
Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Chatsworth
Assembly: 64
Senate: 35
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 33.87023
Longitude: -118.2755
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAR000009803
Alias Type: EPA Identification Number
Alias Name: 110013831728
Alias Type: EPA (FRS #)
Alias Name: 71003444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Non-Submittal
Completed Date: 04/10/2001
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported

PRIME WHEEL CORP (Continued) **S105422038**

Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 017345-023512
Facility Type: 01
Facility Status: Permit
Area: 22
Permit Number: 000014262
Permit Status: Permit

Region: LA
Permit Category: S
Facility Id: 017345-047514
Facility Type: S6
Facility Status: Closed
Area: 22
Permit Number: CGI014350
Permit Status: Closed

Region: LA
Permit Category: Not reported
Facility Id: 024098-033446
Facility Type: Not reported
Facility Status: OPEN
Area: 22
Permit Number: Not reported
Permit Status: Not reported

NPDES:
Npdes Number: CAS000001
Facility Status: Active
Agency Id: 0
Region: 4
Regulatory Measure Id: 190693
Order No: 97-03-DWQ
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 4 19I014350
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 07/06/1998
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Prime Wheel Corp LRP
Discharge Address: 17705 S Main St
Discharge City: Gardena
Discharge State: California
Discharge Zip: 90248
RECEIVED DATE: Not reported
PROCESSED DATE: Not reported
STATUS CODE NAME: Not reported
STATUS DATE: Not reported

PRIME WHEEL CORP (Continued) **S105422038**

PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4

PRIME WHEEL CORP (Continued) **S105422038**

Regulatory Measure Id:	190693
Order No:	Not reported
Regulatory Measure Type:	Industrial
Place Id:	Not reported
WDID:	4 19I014350
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	05/09/2008
PROCESSED DATE:	07/06/1998
STATUS CODE NAME:	Active
STATUS DATE:	07/06/1998
PLACE SIZE:	17
PLACE SIZE UNIT:	Acres
FACILITY CONTACT NAME:	Wei Chen
FACILITY CONTACT TITLE:	DIRECTOR OF ENVIRONMENTAL DIVISION
FACILITY CONTACT PHONE:	310-516-9126
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	WCHEN@PRIMEWHEEL.COM
OPERATOR NAME:	Prime Wheel Corp LRP
OPERATOR ADDRESS:	17705 S Main St
OPERATOR CITY:	Gardena
OPERATOR STATE:	California
OPERATOR ZIP:	90248
OPERATOR CONTACT NAME:	Wei Chen
OPERATOR CONTACT TITLE:	DIRECTOR OF ENVIRONMENTAL DIVISION
OPERATOR CONTACT PHONE:	310-516-9126
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	WCHEN@PRIMEWHEEL.COM
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	310-516-9126
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported

PRIME WHEEL CORP (Continued) **S105422038**

CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Dominguez Channel
CERTIFIER NAME:	WEI CHEN
CERTIFIER TITLE:	Director of Environmental Division
CERTIFICATION DATE:	08-APR-15
PRIMARY SIC:	3714-Motor Vehicle Parts and Accessories
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

WDS:

Facility ID:	4 19I014350
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	4
Facility Telephone:	3105169126
Facility Contact:	MITCH TUNG
Agency Name:	PRIME WHEEL CORP
Agency Address:	17705 S Main St
Agency City,St,Zip:	Gardena 902483516
Agency Contact:	ANGELI QUELITANO
Agency Telephone:	3105169126
Agency Type:	Private
SIC Code:	0
SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best

PRIME WHEEL CORP (Continued) **S105422038**

management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Agency:	Prime Wheel Corp LRP
Agency Address:	17705 S Main St, Gardena, CA 90248
Place/Project Type:	Industrial - Motor Vehicle Parts and Accessories
SIC/NAICS:	3714
Region:	4
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	4 19I014350
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	07/06/1998
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	1
Violations within 5 years:	1
Latitude:	33.86978
Longitude:	-118.27556

106
SE
1/2-1
0.952 mi.
5028 ft.

GOLDEN WEST CIRCUITS, INC. - CARSON **ENVIROSTOR** **S110493874**
1139 E. DOMINGUEZ STREET #A **N/A**
CARSON, CA 90746

Relative:
Lower

Actual:
14 ft.

ENVIROSTOR:

Facility ID:	71002805
Status:	Refer: Other Agency
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Chatsworth
Assembly:	Not reported
Senate:	Not reported
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	33.84196

GOLDEN WEST CIRCUITS, INC. - CARSON (Continued) **S110493874**

Longitude: -118.2538
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD981395320
Alias Type: EPA Identification Number
Alias Name: 71002805
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

107
SSW
1/2-1
0.958 mi.
5057 ft.

MARTIN ADAMS DUMP
213 ST TO 21111 DOLORES
CARSON, CA 90745

SEMS **1000412290**
ENVIROSTOR **CAD981399520**
SWF/LF
CHMIRS

Relative:
Lower

Actual:
25 ft.

SEMS:
Site ID: 902315
EPA ID: CAD981399520
Cong District: 31
FIPS Code: 6037
Latitude: Not reported
Longitude: Not reported
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Detail:
Region: 9
Site ID: 902315
EPA ID: CAD981399520
Site Name: MARTIN ADAMS DUMP
NPL: N
FF: N
OU: 0
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1987-12-01 00:00:00
Finish Date: 12/1/1987
Qual: L

MARTIN ADAMS DUMP (Continued) **1000412290**

Current Action Lead: EPA Perf

Region: 9
Site ID: 902315
EPA ID: CAD981399520
Site Name: MARTIN ADAMS DUMP
NPL: N
FF: N
OU: 0
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1986-05-01 00:00:00
Finish Date: 5/1/1986
Qual: Not reported
Current Action Lead: EPA Perf

Region: 9
Site ID: 902315
EPA ID: CAD981399520
Site Name: MARTIN ADAMS DUMP
NPL: N
FF: N
OU: 0
Action Code: OO
Action Name: SITE REASS
SEQ: 1
Start Date: 2013-07-01 00:00:00
Finish Date: 10/1/2014
Qual: N
Current Action Lead: EPA Perf

Region: 9
Site ID: 902315
EPA ID: CAD981399520
Site Name: MARTIN ADAMS DUMP
NPL: N
FF: N
OU: 0
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1989-09-12 00:00:00
Finish Date: 9/12/1989
Qual: H
Current Action Lead: EPA Perf

Region: 9
Site ID: 902315
EPA ID: CAD981399520
Site Name: MARTIN ADAMS DUMP
NPL: N
FF: N
OU: 0
Action Code: PA
Action Name: PA
SEQ: 2

MARTIN ADAMS DUMP (Continued) **1000412290**

Start Date:	1988-06-01 00:00:00
Finish Date:	6/1/1988
Qual:	L
Current Action Lead:	EPA Perf
Region:	9
Site ID:	902315
EPA ID:	CAD981399520
Site Name:	MARTIN ADAMS DUMP
NPL:	N
FF:	N
OU:	0
Action Code:	ES
Action Name:	ESI
SEQ:	1
Start Date:	1995-09-27 00:00:00
Finish Date:	11/12/2002
Qual:	L
Current Action Lead:	St Perf

ENVIROSTOR:

Facility ID:	19530002
Status:	Inactive - Action Required
Status Date:	08/04/2015
Site Code:	400551
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	20
NPL:	NO
Regulatory Agencies:	US EPA
Lead Agency:	US EPA
Program Manager:	Not reported
Supervisor:	* Greg Holmes
Division Branch:	Cleanup Cypress
Assembly:	64
Senate:	35
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	EPA Grant
Latitude:	33.83688
Longitude:	-118.2726
APN:	NONE SPECIFIED
Past Use:	LANDFILL - CONSTRUCTION, LANDFILL - DOMESTIC, LANDFILL - HAZARDOUS WASTE
Potential COC:	* UNSPECIFIED ACID SOLUTION * OTHER SPENT CATALYST Benzene Methane Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Acetone Carbon tetrachloride Chlorobenzene Cyclohexane 1,2-Dichloroethylene (cis Ethylbenzene Methyl ethyl ketone (2-Butanone Toluene Xylenes
Confirmed COC:	20013-NO 10193-NO Benzene Methane Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Acetone Cyclohexane 1,2-Dichloroethylene (cis Ethylbenzene Toluene Carbon tetrachloride Xylenes Vinyl chloride Trichloroethylene (TCE Methyl ethyl ketone (2-Butanone Chlorobenzene
Potential Description:	IA, SOIL, SV
Alias Name:	IMPERIAL CARSON MOBILE ESTATES TRAILR PK

MARTIN ADAMS DUMP (Continued) **1000412290**

Alias Type: Alternate Name
Alias Name: CAD981399520
Alias Type: EPA Identification Number
Alias Name: 400551
Alias Type: Project Code (Site Code)
Alias Name: 19530002
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 03/14/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 01/15/1981
Comments: FACILITY IDENTIFIED CO ENGR. INDEX

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Reassessment
Completed Date: 05/29/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: *Site Inspection (SI) Report
Completed Date: 02/10/1998
Comments: Sampled soil and groundwater and used results to prepare an Expanded Site Inspection Report (ESI) per USEPA standards. ESI sent to U.S. EPA.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/12/1989
Comments: SITE SCREENING DONE EPA COMPLETED SCREENING SITE INSPECTION AND RECOMMEND LISTING SITE INSPECTION.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 06/22/2006
Comments: Site Screening Completed

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

MARTIN ADAMS DUMP (Continued) **1000412290**

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AQ-0006
Lat/Long:	33.83694 / -118.27278
Owner Name:	Coogan/Browning Reality
Owner Telephone:	7145469911
Owner Address:	Not reported
Owner Address2:	2009 Swan Dr
Owner City,St,Zip:	Costa Mesa, CA 92626
Operational Status:	Closed
Operator:	Adams, M
Operator Phone:	7134652347
Operator Address:	Not reported
Operator Address2:	12910 Figaro
Operator City,St,Zip:	Houston, TX 77024
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$20.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Pre-regulations
Landuse Name:	Residential
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Quarterly
Accepted Waste:	Not reported
Closure Date:	12/31/1958
Closure Type:	Estimated
Disposal Acreage:	$20.00
SWIS Num:	19-AQ-0006
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	Not reported
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	Not reported
Remaining Capacity:	Not reported
Remaining Capacity with Units:	Not reported
Lat/Long:	33.83694 / -118.27278

LOS ANGELES CO. LF:

Site ID:	1963
Alt. Address:	Not reported
Site Contact:	Not reported
Site Contact Phone:	Not reported
Site Email:	Not reported
Site Website:	Not reported
Site Type:	Unknown
Site SWIS Number:	19-AQ-0006
Beginning Operation Date:	1948
Ending Operation Date:	Dec-58
Local Enforcement Agency:	County Public Health
Maximun Depth Fill(Ft):	34
Permitted Capacity:	Not reported
Present Use:	Residential
Remaining Capacity(Million):	Not reported
Status:	Closed

MARTIN ADAMS DUMP (Continued) **1000412290**

Waste Accepted: Commercial; Inert; Liquid; Residential
Hours of Operation: Not reported
Disposal Area (Acre): 20

Detail As Of 01/2014:
Operator Name: M. Adams
Operator Address: 12910 Figaro Drive
Operator City/State/Zip: HUSTON, TX 77024
Operator Contact: Not reported
Operator Telephone: (713) 465-2347
Operator Email: Not reported
Owner Name: Coogan-Browning Reality
Owner Address: 2009 Swan Drive
Owner City/State/Zip: Costa Mesa, CA 92626
Owner Contact: Wayne Browning
Owner Telephone: (714) 546-9911
Owner Email: Not reported

CHMIRS:
OES Incident Number: 10-7307
OES notification: 12/06/2010
OES Date: Not reported
OES Time: Not reported
Date Completed: Not reported
Property Use: Not reported
Agency Id Number: Not reported
Agency Incident Number: Not reported
Time Notified: Not reported
Time Completed: Not reported
Surrounding Area: Not reported
Estimated Temperature: Not reported
Property Management: Not reported
More Than Two Substances Involved?: Not reported
Resp Agncy Personel # Of Decontaminated: Not reported
Responding Agency Personel # Of Injuries: Not reported
Responding Agency Personel # Of Fatalities: Not reported
Others Number Of Decontaminated: Not reported
Others Number Of Injuries: Not reported
Others Number Of Fatalities: Not reported
Vehicle Make/year: Not reported
Vehicle License Number: Not reported
Vehicle State: Not reported
Vehicle Id Number: Not reported
CA DOT PUC/ICC Number: Not reported
Company Name: Not reported
Reporting Officer Name/ID: Not reported
Report Date: Not reported
Facility Telephone: Not reported
Waterway Involved: Yes
Waterway: storm drain
Spill Site: Residence
Cleanup By: Contractor
Containment: Not reported
What Happened: Not reported
Type: Not reported
Measure: Unknown
Other: Not reported

MARTIN ADAMS DUMP (Continued) **1000412290**

Date/Time:	1000
Year:	2010
Agency:	City of Carson
Incident Date:	12/6/2010
Admin Agency:	LACoFD Health Haz-Mat
Amount:	Not reported
Contained:	Unknown
Site Type:	storm drain
E Date:	Not reported
Substance:	Sewage
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	The caller is reporting a sewage spill from a private residence. The sewage spilled into the gutter and into a storm drain. The storm drain has been diked off.

Count: 13 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CARSON	S111075480	GIANT CLEANERS	21950 AVALON BLVD STE E & F	90745	DRYCLEANERS
CARSON	S105960467	GARDENA VALLEY LANDFILL NOS. 1 AND	BLOCK BOUNDED BY DEL AMO BLVD,	90745	CA BOND EXP. PLAN
CARSON	S118939163	SOUTHWEST STEEL ROLLING MILLS	19101 SOUTH BROADWAY		SWF/LF
CARSON	S118939131	BROADWAY - MAIN LANDFILL	19101 SOUTH BROADWAY		SWF/LF
CARSON	S111075962	KATZ DUMP	18401 SOUTH BROADWAY		SWF/LF
CARSON	1015732657	ALCO PACIFIC INC.	16914 S. BROADWAY	90248	SEMS-ARCHIVE, CORRACTS, RCRA NonGen / NLR
CARSON	S111075996	MARTIN HALLEMAN	18930 SOUTH FIGUEROA STREET		SWF/LF
CARSON	S111075800	BROWN DUMP	18601 SOUTH FIGUEROA STREET		SWF/LF
CARSON	S100833322	GOLDEN EAGLE REFINERY	2100 SOUTH FIGUEROA STREET	90745	CA BOND EXP. PLAN
CARSON	S101480710	TED HAMMETT (CARSON)	EAST OF ALAMEDA & NORTH OF SEP	90745	ENVIROSTOR
COMPTON	S111076069	ROSE WILLIAMS LANDFILL	13914-13918 SOUTH MAIN STREET	90248	SWF/LF
LOS ANGELES	S105721860	MCMILLEN OIL FIELD	15100 MAIN	90248	CPS-SLIC
TORRANCE	S105960461	DEL AMO BOULEVARD	DEL AMO BOULEVARD, BETWEEN VER	90502	CA BOND EXP. PLAN

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 66

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 63

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/12/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 48

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 15

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 01/19/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/08/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 39

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2018
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/24/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/27/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 27

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 04/19/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 46

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 02/08/2018
Date Data Arrived at EDR: 02/08/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 0

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 01/19/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 63

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 02/15/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 7

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/26/2017
Date Made Active in Reports: 02/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 94

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/20/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/09/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 01/04/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 79

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 01/25/2018
Date Data Arrived at EDR: 02/28/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 72

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/20/2017
Date Data Arrived at EDR: 12/21/2017
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 92

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 28

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/23/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 03/02/2018
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/02/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA LIVERMORE-PLEASANTON
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA SAN FRANCISCO CO
Cupa facilities

Date of Government Version: 04/20/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 10
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

DRYCLEAN AVAQMD: DRYCLEAN AVAQMD
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52
Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/11/2018
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 36
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: DRYCLEAN SOUTH COAST
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/16/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/23/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 54

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2018
Date Data Arrived at EDR: 02/16/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 46

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 41

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/08/2018
Date Data Arrived at EDR: 01/09/2018
Date Made Active in Reports: 02/06/2018
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/27/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 04/19/2018
Number of Days to Update: 45

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/05/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/23/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/21/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

OTHER OIL GAS: OTHER OIL & GAS (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

PROD WATER PONDS: PROD WATER PONDS (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

PROJECT: PROJECT (GEOTRACKER)
Projects sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

NON-CASE INFO: NON-CASE INFO (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

SAMPLING POINT: SAMPLING POINT (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

WELL STIM PROJ: WELL SAMP PROJ (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

CIWQS: The California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 60

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

UIC GEO: UIC GEO (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/12/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 51

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2018
Date Data Arrived at EDR: 01/11/2018
Date Made Active in Reports: 02/22/2018
Number of Days to Update: 42

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa Facility List

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 10

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/25/2018
Date Data Arrived at EDR: 01/26/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 47

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/26/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/26/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 14

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 48

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/05/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 40

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 39

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/30/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/05/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 9

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/08/2018
Date Made Active in Reports: 04/30/2018
Number of Days to Update: 53

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/26/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 47

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/02/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 54

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 28

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 02/09/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 01/16/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 29

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/14/2018
Number of Days to Update: 13

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/01/2018
Date Data Arrived at EDR: 01/17/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 28

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 13

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 40

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 03/30/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 28

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 01/11/2018
Date Data Arrived at EDR: 01/12/2018
Date Made Active in Reports: 02/08/2018
Number of Days to Update: 27

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 15

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 03/29/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 18

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 30

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 01/31/2018
Date Data Arrived at EDR: 02/01/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 41

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 04/03/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/05/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 35

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/28/2018
Number of Days to Update: 49

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/19/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 46

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/15/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/15/2018
Number of Days to Update: 50

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/05/2018
Date Data Arrived at EDR: 04/10/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/19/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/05/2018
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 01/03/2018
Date Made Active in Reports: 02/14/2018
Number of Days to Update: 42

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/17/2017
Number of Days to Update: 14

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/05/2018
Date Data Arrived at EDR: 03/07/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 40

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/23/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 11

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/02/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/20/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 43

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 07/02/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2018
Date Data Arrived at EDR: 03/20/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/07/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/22/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/04/2018
Date Data Arrived at EDR: 02/06/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 42

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 52

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 03/29/2018
Number of Days to Update: 16

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 04/16/2018
Number of Days to Update: 20

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/09/2018
Number of Days to Update: 33

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/22/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 02/06/2018
Date Data Arrived at EDR: 02/07/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 37

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/16/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 01/08/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 29

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 02/28/2018
Next Scheduled EDR Contact: 06/18/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 01/26/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/19/2018
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 04/17/2018
Number of Days to Update: 26

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/16/2018
Number of Days to Update: 50

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 48

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2017
Date Data Arrived at EDR: 01/25/2018
Date Made Active in Reports: 03/20/2018
Number of Days to Update: 54

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/28/2018
Date Data Arrived at EDR: 03/14/2018
Date Made Active in Reports: 03/30/2018
Number of Days to Update: 16

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/14/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/27/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/04/2018
Number of Days to Update: 31

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 02/01/2018
Date Data Arrived at EDR: 02/02/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 47

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 03/22/2018
Number of Days to Update: 36

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/31/2018
Date Made Active in Reports: 03/09/2018
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/08/2018
Next Scheduled EDR Contact: 06/25/2018
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

FORMER BKK CARSON DUMP
340 EAST 192 STREET
CARSON, CA 90746

TARGET PROPERTY COORDINATES

Latitude (North):	33.854268 - 33° 51' 15.36''
Longitude (West):	118.268449 - 118° 16' 6.42''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	382655.5
UTM Y (Meters):	3746527.5
Elevation:	27 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5633779 TORRANCE, CA
Version Date:	2012
Southeast Map:	5652670 LONG BEACH, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

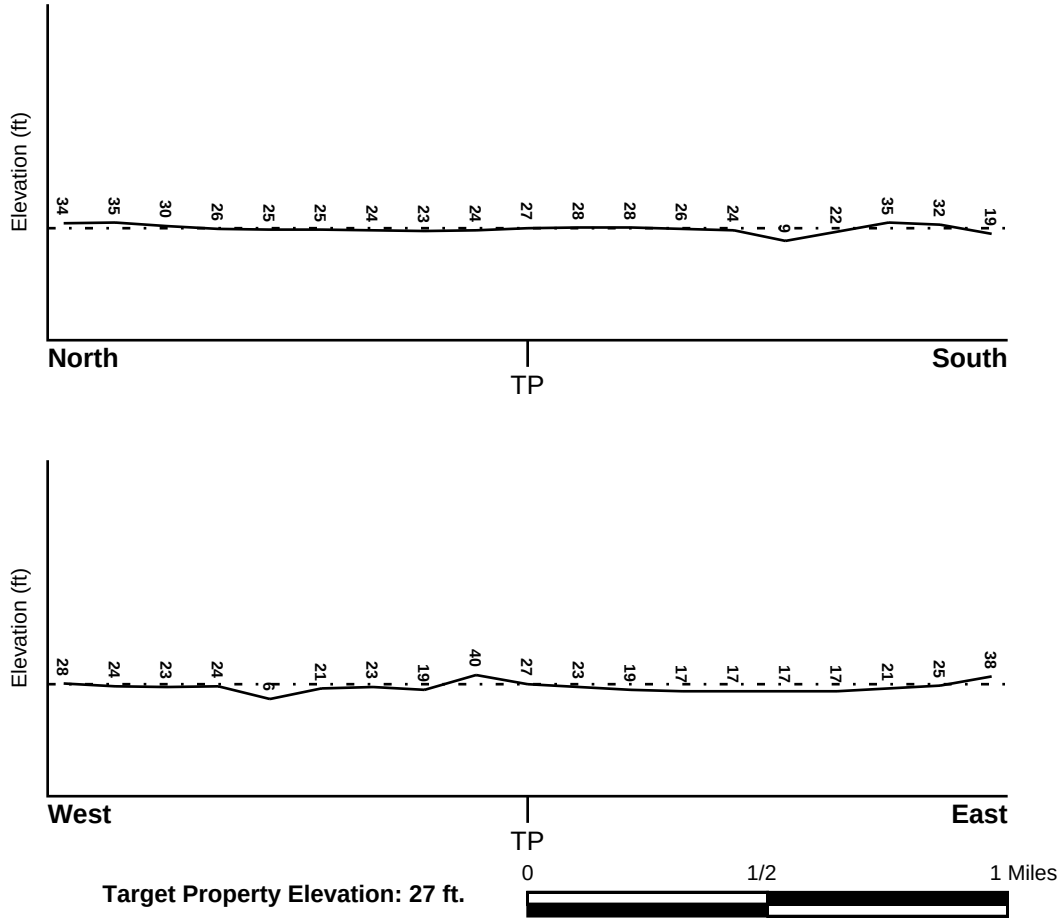
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 27 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06037C1935F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
TORRANCE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/8 - 1/4 Mile NW
Site Name:	Victoria Golf Course
Site EPA ID Number:	CAD980818926
Groundwater Flow Direction:	Southeast
Measured Depth to Water:	7.8 feet in the semi-perched aquifer.
Hydraulic Connection:	The near-surface semi-perched aquifer is hydraulically connected to the underlying Gage aquifer.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
B7	1/2 - 1 Mile WNW	Not Reported
B8	1/2 - 1 Mile WNW	Not Reported
9	1/2 - 1 Mile West	S
1G	1/2 - 1 Mile WNW	Not Reported
2G	1/2 - 1 Mile WNW	Not Reported
3G	1/2 - 1 Mile West	S

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000138626	1/8 - 1/4 Mile NNE
A2	USGS40000138627	1/8 - 1/4 Mile NNE
A3	USGS40000138625	1/8 - 1/4 Mile NNE
A4	USGS40000138622	1/8 - 1/4 Mile NNE
A5	USGS40000138623	1/8 - 1/4 Mile NNE
A6	USGS40000138624	1/8 - 1/4 Mile NNE
10	USGS40000138672	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

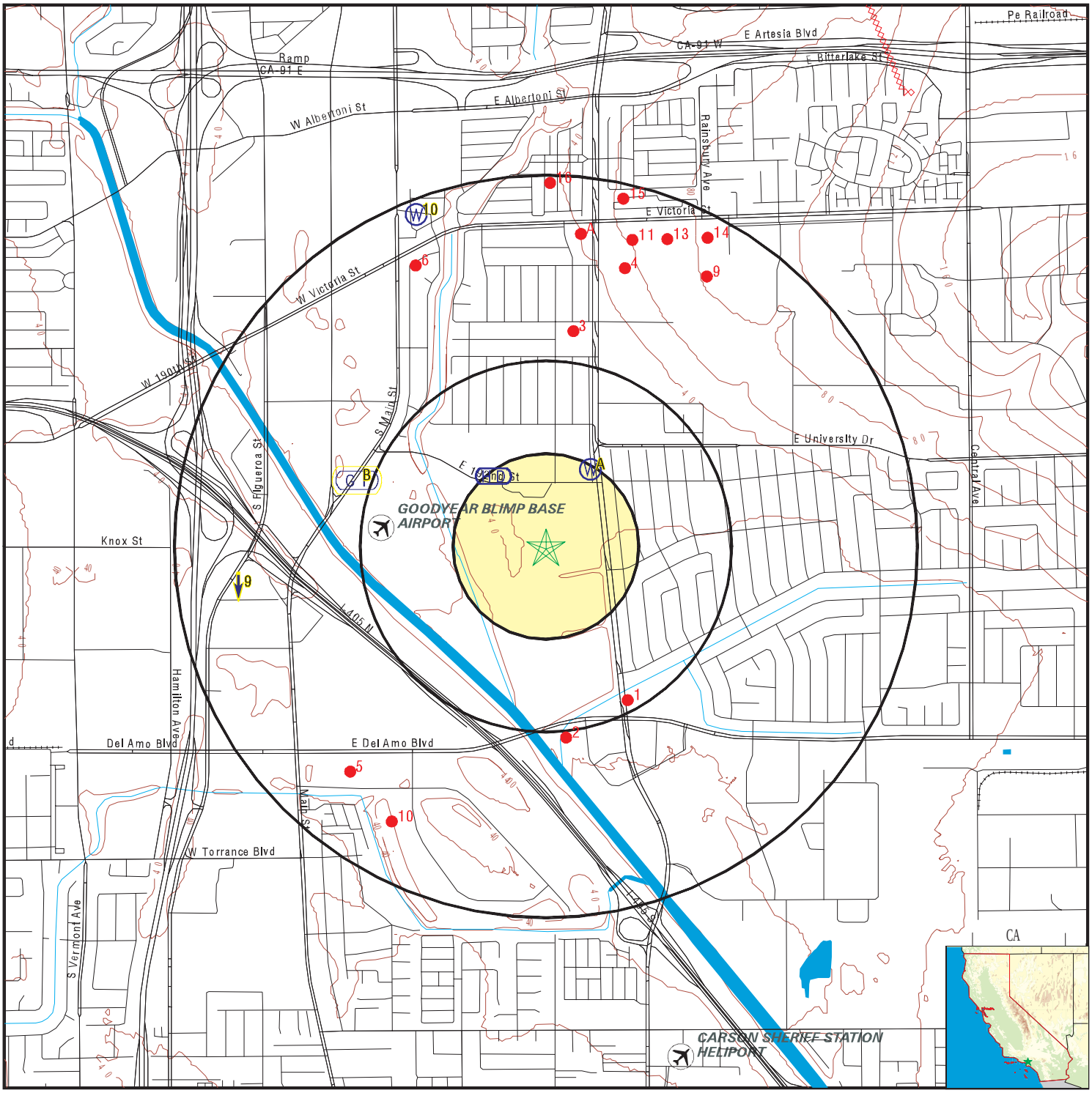
MAP ID	WELL ID	LOCATION FROM TP
1	CAOG11000205413	1/4 - 1/2 Mile SSE
2	CAOG11000205201	1/2 - 1 Mile South
3	CAOG11000205412	1/2 - 1 Mile North
4	CAOG11000205901	1/2 - 1 Mile NNE
5	CAOG11000204802	1/2 - 1 Mile SW
6	CAOG11000204869	1/2 - 1 Mile NNW
A7	CAOG11000205399	1/2 - 1 Mile North
A8	CAOG11000205541	1/2 - 1 Mile North

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
9	CAOG11000205898	1/2 - 1 Mile NNE
10	CAOG11000204740	1/2 - 1 Mile SSW
11	CAOG11000205900	1/2 - 1 Mile NNE
A12	CAOG11000205396	1/2 - 1 Mile North
13	CAOG11000205899	1/2 - 1 Mile NNE
14	CAOG11000205897	1/2 - 1 Mile NNE
15	CAOG11000205625	1/2 - 1 Mile NNE
16	CAOG11000200794	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 5315435.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Former BKK Carson Dump	CLIENT:	GeoSyntec Consultants
ADDRESS:	340 East 192 Street Carson CA 90746	CONTACT:	Steven Phillips
LAT/LONG:	33.854268 / 118.268449	INQUIRY #:	5315435.2s
		DATE:	May 30, 2018 1:35 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
NNE **FED USGS** **USGS40000138626**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126118155805		
Monloc name:	004S013W05F005S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572778
Longitude:	-118.266361	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	20100906	Welldepth:	640
Welldepth units:	ft	Wellholedepth:	1820
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A2
NNE **FED USGS** **USGS40000138627**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126118155806		
Monloc name:	004S013W05F006S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572778
Longitude:	-118.266361	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	20100906	Welldepth:	380
Welldepth units:	ft	Wellholedepth:	1820
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A3
NNE **FED USGS** **USGS40000138625**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126118155804		
Monloc name:	004S013W05F004S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572778
Longitude:	-118.266361	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	20100906	Welldepth:	890
Welldepth units:	ft	Wellholedepth:	1820
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A4
NNE **FED USGS** **USGS40000138622**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126118155801		
Monloc name:	004S013W05F001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572778
Longitude:	-118.266361	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	20100906	Welldepth:	1800
Welldepth units:	ft	Wellholedepth:	1820
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A5
NNE **FED USGS** **USGS40000138623**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126118155802		
Monloc name:	004S013W05F002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572778
Longitude:	-118.266361	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	20100906	Welldepth:	1240
Welldepth units:	ft	Wellholedepth:	1820
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

A6
NNE **FED USGS** **USGS40000138624**
1/8 - 1/4 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335126118155803		
Monloc name:	004S013W05F003S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8572778
Longitude:	-118.266361	Sourcemap scale:	24000
Horiz Acc measure:	.1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	20
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	20100906	Welldepth:	1100
Welldepth units:	ft	Wellholedepth:	1820
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

B7
WNW
1/2 - 1 Mile
Higher

Site ID:	R-10383
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	26
Date:	03/06/1989

AQUIFLOW **55241**

B8
WNW
1/2 - 1 Mile
Higher

Site ID:	R-10383
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	26
Date:	03/06/1989

AQUIFLOW **55242**

9
West
1/2 - 1 Mile
Higher

Site ID:	I-0599
Groundwater Flow:	S
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	80.9
Date:	11/17/1991

AQUIFLOW **55224**

10
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000138672**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335202118162501		
Monloc name:	003S013W32E002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070105	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.8672386
Longitude:	-118.2745168	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	579
Welldepth units:	ft	Wellholedepth:	579
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

1G
WNW
1/2 - 1 Mile
Lower

Site ID:	R-10383
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	26
Date:	03/06/1989

AQUIFLOW **55241**

2G
WNW
1/2 - 1 Mile
Lower

Site ID:	R-10383
Groundwater Flow:	Not Reported
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	26
Date:	03/06/1989

AQUIFLOW **55242**

3G
West
1/2 - 1 Mile
Lower

Site ID:	I-0599
Groundwater Flow:	S
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	80.9
Date:	11/17/1991

AQUIFLOW **55224**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
SSE **OIL_GAS** **CAOG11000205413**
1/4 - 1/2 Mile

District nun:	1	Api number:	03706760
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	D. D. Dunlap and Dorothy Dunlap		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	5
Township:	04S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Del Amo-Bell	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000205413		

2
South **OIL_GAS** **CAOG11000205201**
1/2 - 1 Mile

District nun:	1	Api number:	03706232
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	West American Oil Company		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	5
Township:	04S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Dominguez Estates	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000205201		

3
North **OIL_GAS** **CAOG11000205412**
1/2 - 1 Mile

District nun:	1	Api number:	03706759
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Dunlap and Bell		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Kim-Bell	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000205412		

4
NNE **OIL_GAS** **CAOG11000205901**
1/2 - 1 Mile

District nun:	1	Api number:	03707535
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Carson	Wellnumber:	21
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205901		

5
SW **OIL_GAS** **CAOG11000204802**
1/2 - 1 Mile

District nun:	1	Api number:	03705627
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Marcus-Goldberg		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	6
Township:	04S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		

Comments:	Not Reported		
Leasename:	Marigold-Del Amo	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000204802		

6
NNW
1/2 - 1 Mile

OIL_GAS **CAOG11000204869**

District nun:	1	Api number:	03705717
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Nevada Drilling Co.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	31
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Nevada	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000204869		

A7
North
1/2 - 1 Mile

OIL_GAS **CAOG11000205399**

District nun:	1	Api number:	03706745
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	B
Operator name:	A. Otis Birch		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	AOG
Site id:	CAOG11000205399		

Map ID
Direction
Distance

Database EDR ID Number

A8
North
1/2 - 1 Mile

OIL_GAS **CAOG11000205541**

District nun:	1	Api number:	03706933
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Transcal Drilling Co. & J Battista Cella		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Transcal Drilling	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205541		

9
NNE
1/2 - 1 Mile

OIL_GAS **CAOG11000205898**

District nun:	1	Api number:	03707532
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Carson	Wellnumber:	17
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000205898		

10
SSW
1/2 - 1 Mile

OIL_GAS **CAOG11000204740**

District nun:	1	Api number:	03705538
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Thomas Kelly & Sons, Inc.		
County name:	Los Angeles	Fieldname:	Any Field
Area name:	Any Area	Section:	7
Township:	04S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Kelly-Del Amo	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000204740		

11
NNE **OIL_GAS** **CAOG11000205900**
1/2 - 1 Mile

District nun:	1	Api number:	03707534
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Carson	Wellnumber:	19
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205900		

A12
North **OIL_GAS** **CAOG11000205396**
1/2 - 1 Mile

District nun:	1	Api number:	03706742
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	American Seamless Tube Corp.		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		

Comments:	Not Reported		
Leasename:	Dasteel	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205396		

13
NNE **OIL_GAS** **CAOG11000205899**
1/2 - 1 Mile

District nun:	1	Api number:	03707533
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Carson	Wellnumber:	18
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205899		

14
NNE **OIL_GAS** **CAOG11000205897**
1/2 - 1 Mile

District nun:	1	Api number:	03707531
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Carson	Wellnumber:	16
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205897		

Map ID
Direction
Distance

Database EDR ID Number

15
NNE **OIL_GAS** **CAOG11000205625**
1/2 - 1 Mile

District nun:	1	Api number:	03707089
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Brea Canon Oil Co.		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Callender	Wellnumber:	119
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	POG
Site id:	CAOG11000205625		

16
North **OIL_GAS** **CAOG11000200794**
1/2 - 1 Mile

District nun:	1	Api number:	03700367
Blm well:	N	Redrill can:	Not Reported
Dryhole:	N	Well status:	P
Operator name:	Union Oil Company of California		
County name:	Los Angeles	Fieldname:	Dominguez
Area name:	Any Area	Section:	32
Township:	03S	Range:	13W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Larronde	Wellnumber:	9
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PWF
Site id:	CAOG11000200794		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
90746	9	0

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 90746

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D

Aerial Photo Decade Package

Former BKK Carson Dump

340 East 192 Street

Carson, CA 90746

Inquiry Number: 5315435.8

May 30, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

05/30/18

Site Name:

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746
EDR Inquiry # 5315435.8

Client Name:

GeoSyntec Consultants
16644 West Bernardo Drive SUITE 301
SAN DIEGO, CA 92127
Contact: Steven Phillips

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2002	1"=500'	Flight Date: June 10, 2002	USDA
1998	1"=500'	Flight Date: February 21, 1998	USGS
1994	1"=500'	Acquisition Date: May 31, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 22, 1989	USDA
1983	1"=500'	Flight Date: November 19, 1983	USGS
1977	1"=500'	Flight Date: January 18, 1977	USGS
1970	1"=500'	Flight Date: February 19, 1970	USGS
1963	1"=500'	Flight Date: February 28, 1963	USGS
1952	1"=500'	Flight Date: April 12, 1952	USDA
1947	1"=500'	Flight Date: June 17, 1947	USGS
1938	1"=500'	Flight Date: July 28, 1938	USDA
1928	1"=500'	Flight Date: January 01, 1928	USGS

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INQUIRY #: 5315435.8
YEAR: 2014
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 2002
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1998
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1994
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1983
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1977
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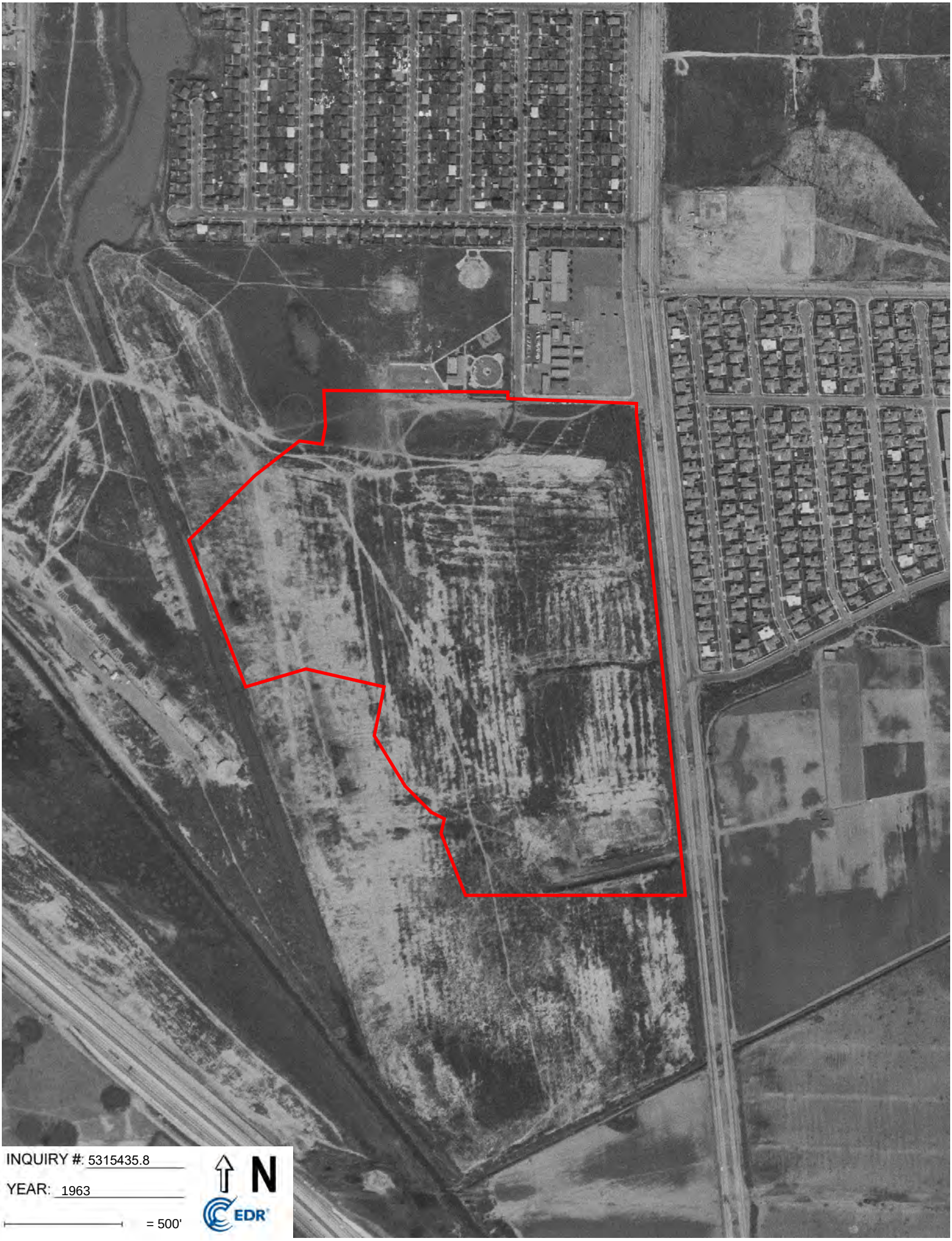
EDR


INQUIRY #: 5315435.8
YEAR: 1970
= 500'
N
EDR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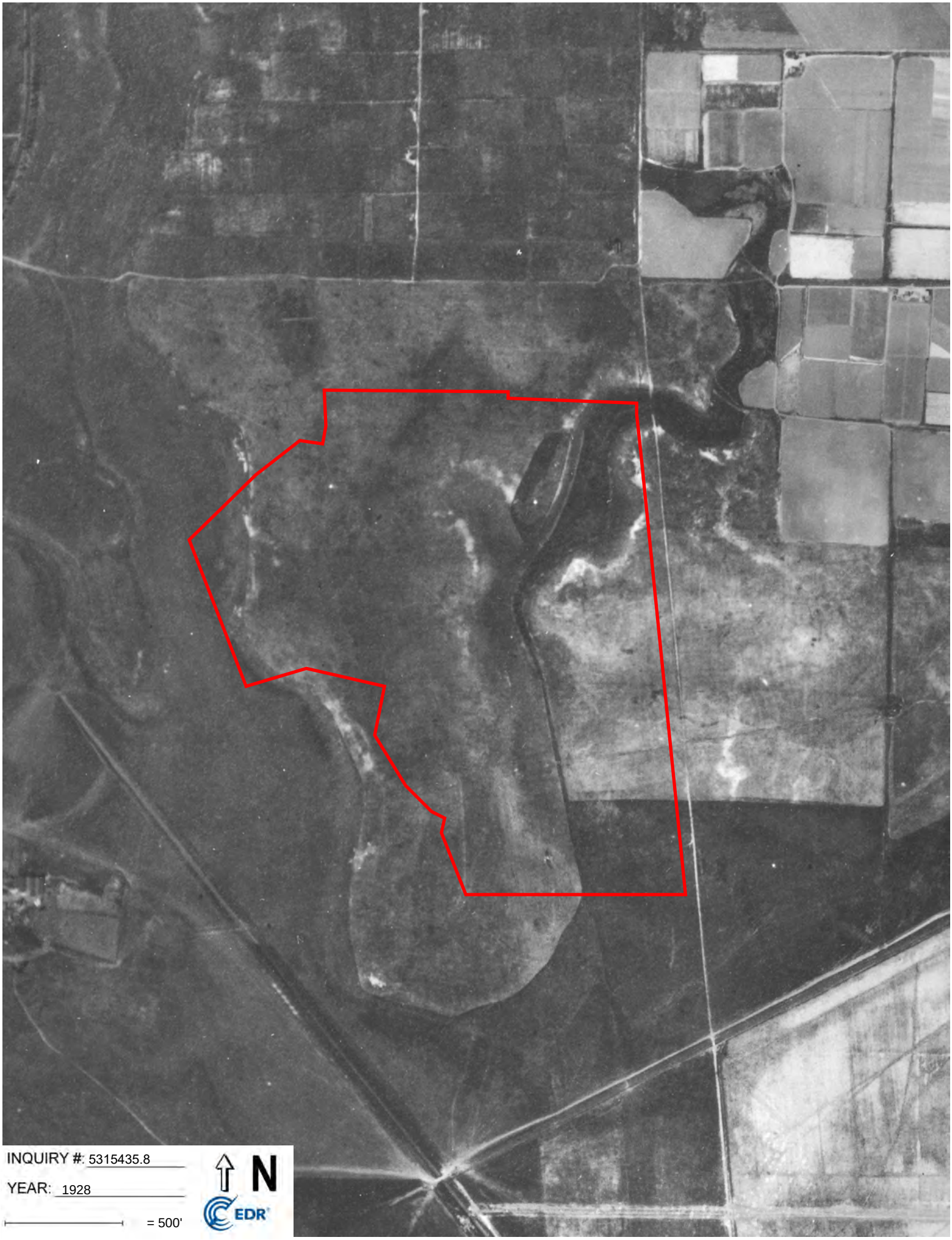
YEAR: 1963
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1952
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1947
= 500'
N
EDR


INQUIRY #: 5315435.8
YEAR: 1938
= 500'
N
EDR



INQUIRY #: 5315435.8

YEAR: 1928

= 500'

N

EDR

APPENDIX E

Historical Topographic Map Report

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746

Inquiry Number: 5315435.4
May 30, 2018

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/30/18

Site Name:

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746
EDR Inquiry # 5315435.4

Client Name:

GeoSyntec Consultants
16644 West Bernardo Drive SUITE 301
SAN DIEGO, CA 92127
Contact: Steven Phillips

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by GeoSyntec Consultants were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# SC0918

Project: Former BKK Carson Dump PIE

Coordinates:

Latitude:	33.854268 33° 51' 15" North
Longitude:	-118.268449 -118° 16' 6" West
UTM Zone:	Zone 11 North
UTM X Meters:	382658.16
UTM Y Meters:	3746721.36
Elevation:	27.00' above sea level

Maps Provided:

2012
1981
1972
1964
1949, 1950, 1951
1947, 1948
1930
1924
1896

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



South Gate
2012
7.5-minute, 24000



Inglewood
2012
7.5-minute, 24000



Long Beach
2012
7.5-minute, 24000



Torrance
2012
7.5-minute, 24000

1981 Source Sheets



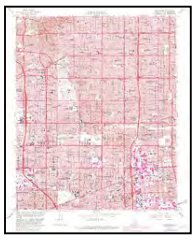
Torrance
1981
7.5-minute, 24000
Aerial Photo Revised 1978



South Gate
1981
7.5-minute, 24000
Aerial Photo Revised 1978



Long Beach
1981
7.5-minute, 24000
Aerial Photo Revised 1978



Inglewood
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1972 Source Sheets



Long Beach
1972
7.5-minute, 24000
Aerial Photo Revised 1972



South Gate
1972
7.5-minute, 24000
Aerial Photo Revised 1972



Inglewood
1972
7.5-minute, 24000
Aerial Photo Revised 1972



Torrance
1972
7.5-minute, 24000
Aerial Photo Revised 1972

1964 Source Sheets



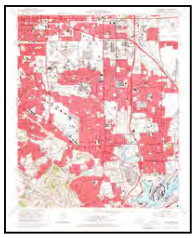
South Gate
1964
7.5-minute, 24000
Aerial Photo Revised 1963



Inglewood
1964
7.5-minute, 24000
Aerial Photo Revised 1963



Long Beach
1964
7.5-minute, 24000
Aerial Photo Revised 1963



Torrance
1964
7.5-minute, 24000
Aerial Photo Revised 1963

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949, 1950, 1951 Source Sheets



Long Beach
1949
7.5-minute, 24000



South Gate
1949
7.5-minute, 24000
Aerial Photo Revised 1947

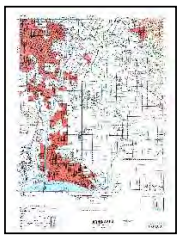


Inglewood
1950
7.5-minute, 24000
Aerial Photo Revised 1947



Torrance
1951
7.5-minute, 24000
Aerial Photo Revised 1947

1947, 1948 Source Sheets



DOWNEY
1947
15-minute, 50000



REDONDO
1948
15-minute, 50000

1930 Source Sheets



Compton
1930
7.5-minute, 24000

1924 Source Sheets



Compton
1924
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1896 Source Sheets



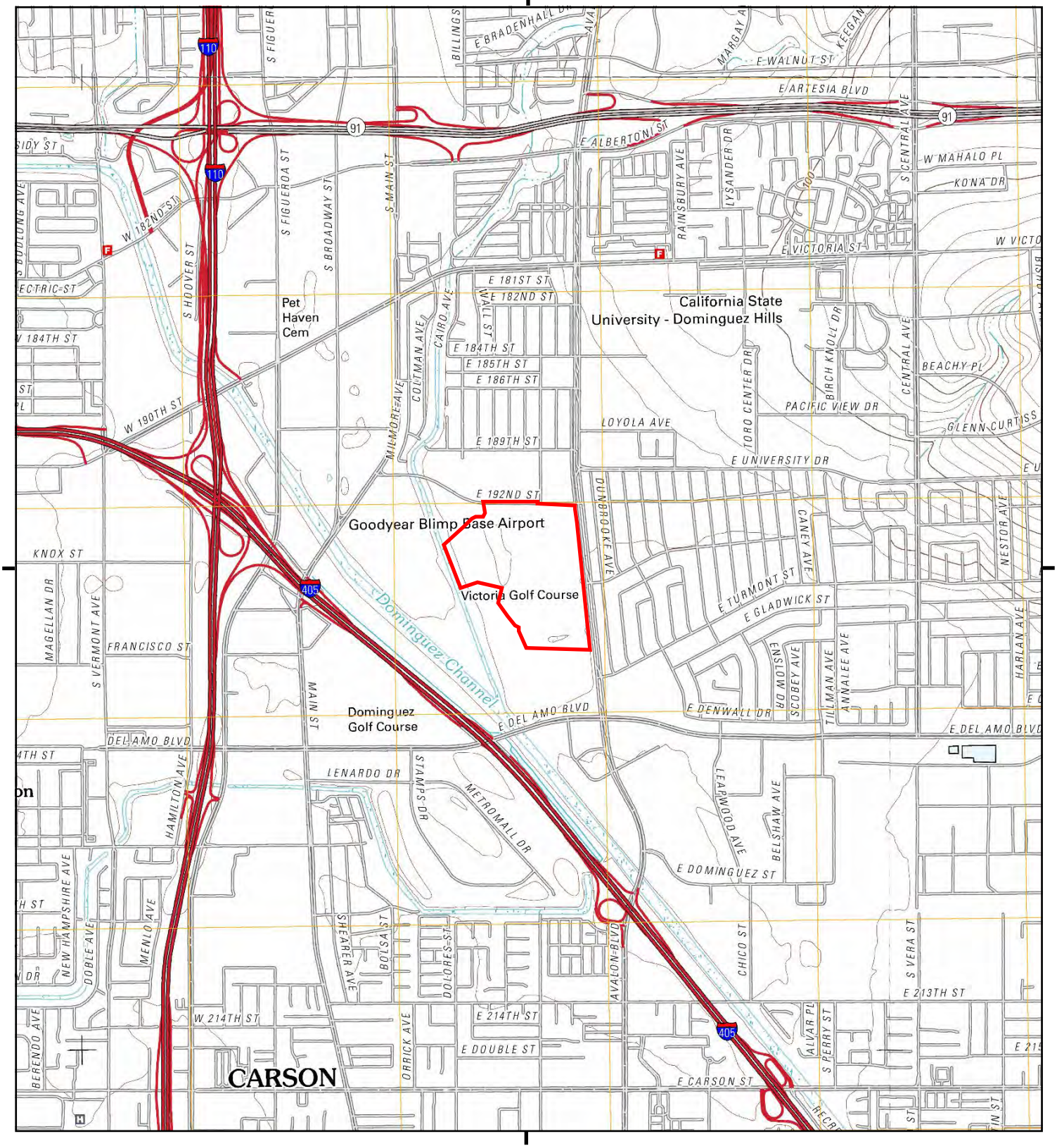
Downey
1896
15-minute, 62500



Redondo
1896
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

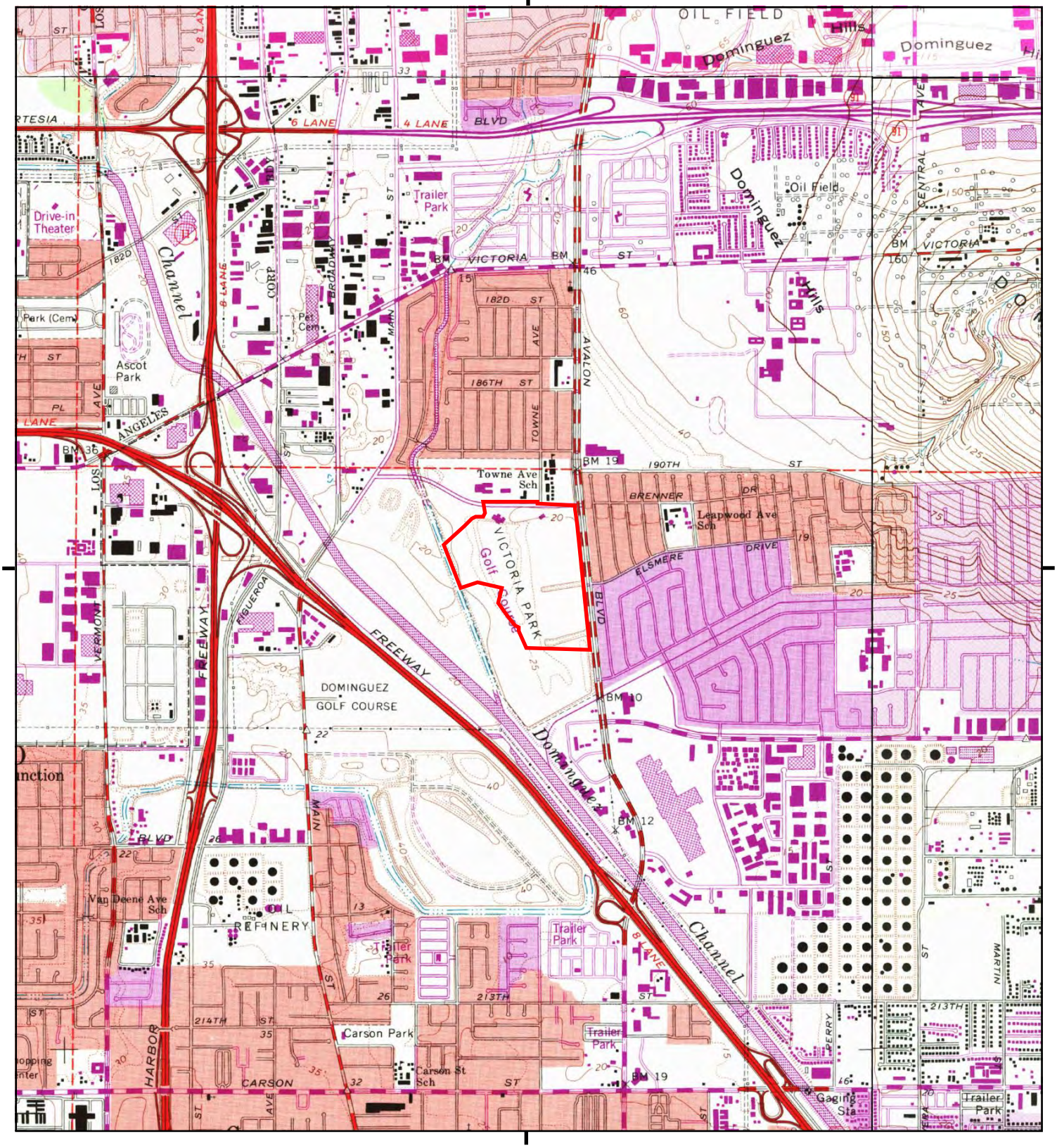
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Torrance, 2012, 7.5-minute
NE, South Gate, 2012, 7.5-minute
SE, Long Beach, 2012, 7.5-minute
NW, Inglewood, 2012, 7.5-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

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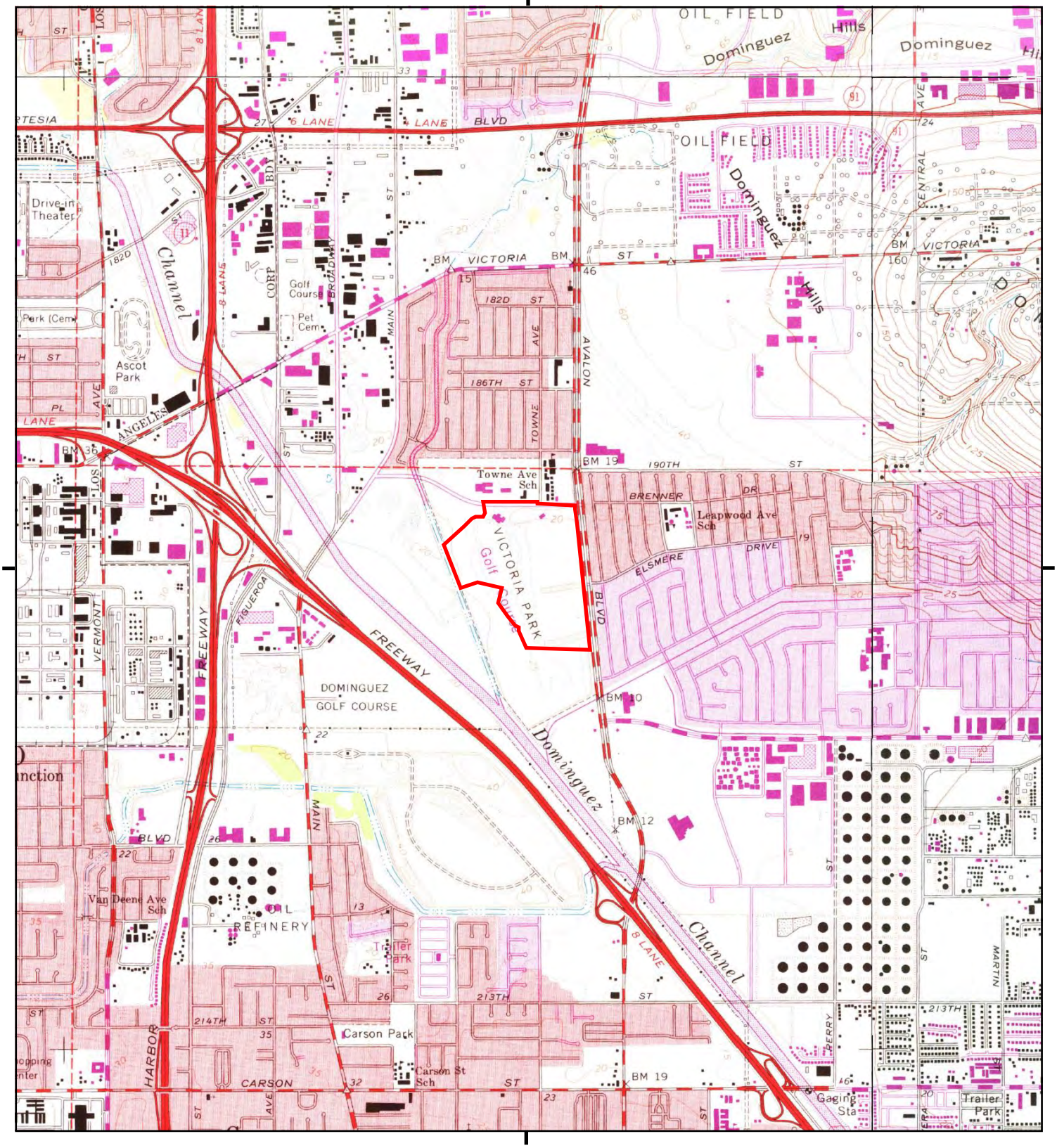
W E
SW S SE

TP, Torrance, 1981, 7.5-minute
NE, South Gate, 1981, 7.5-minute
SE, Long Beach, 1981, 7.5-minute
NW, Inglewood, 1981, 7.5-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

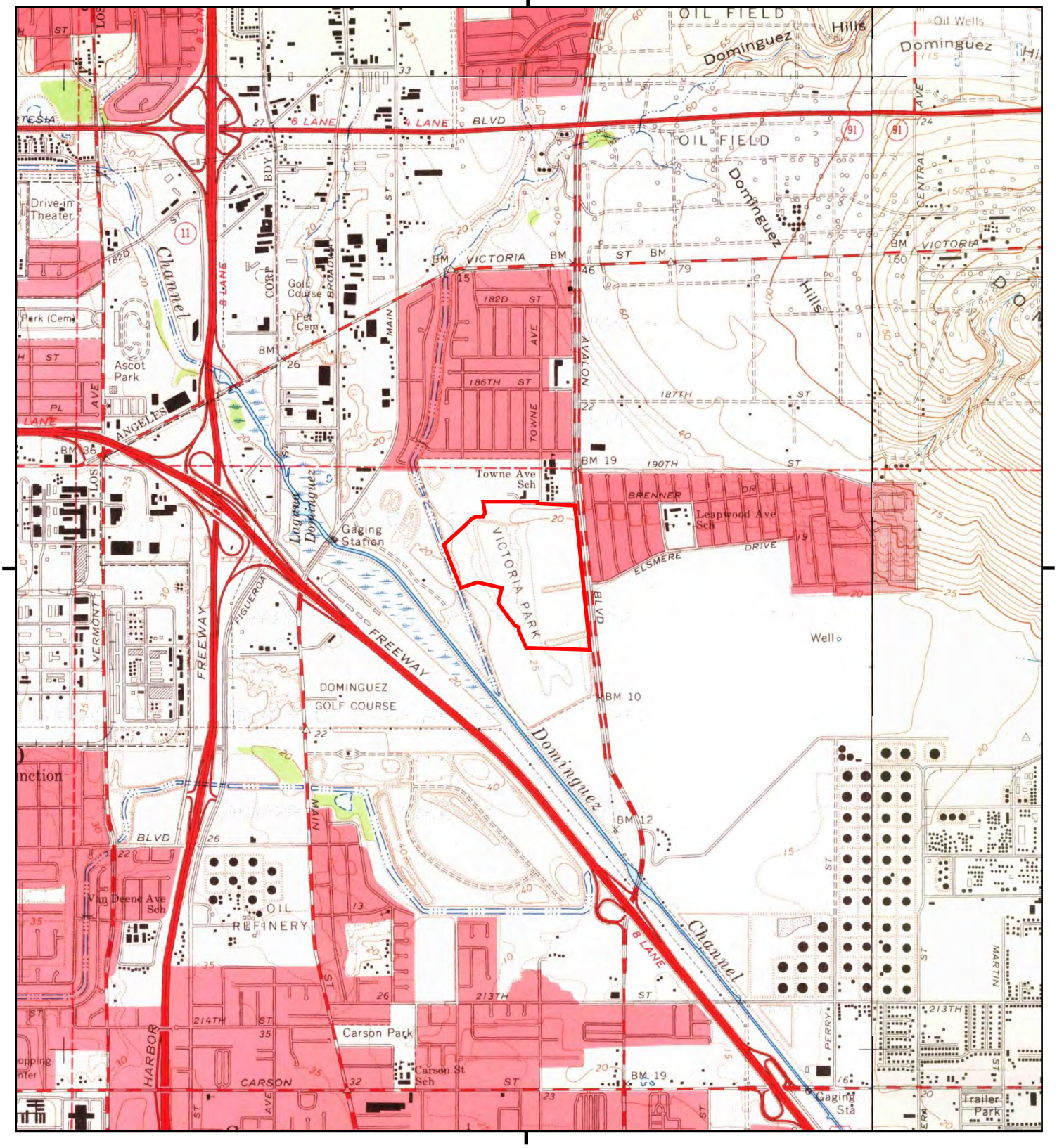
TP, Torrance, 1972, 7.5-minute
NE, South Gate, 1972, 7.5-minute
SE, Long Beach, 1972, 7.5-minute
NW, Inglewood, 1972, 7.5-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N

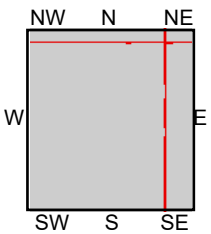
Historical Topo Map

1964



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



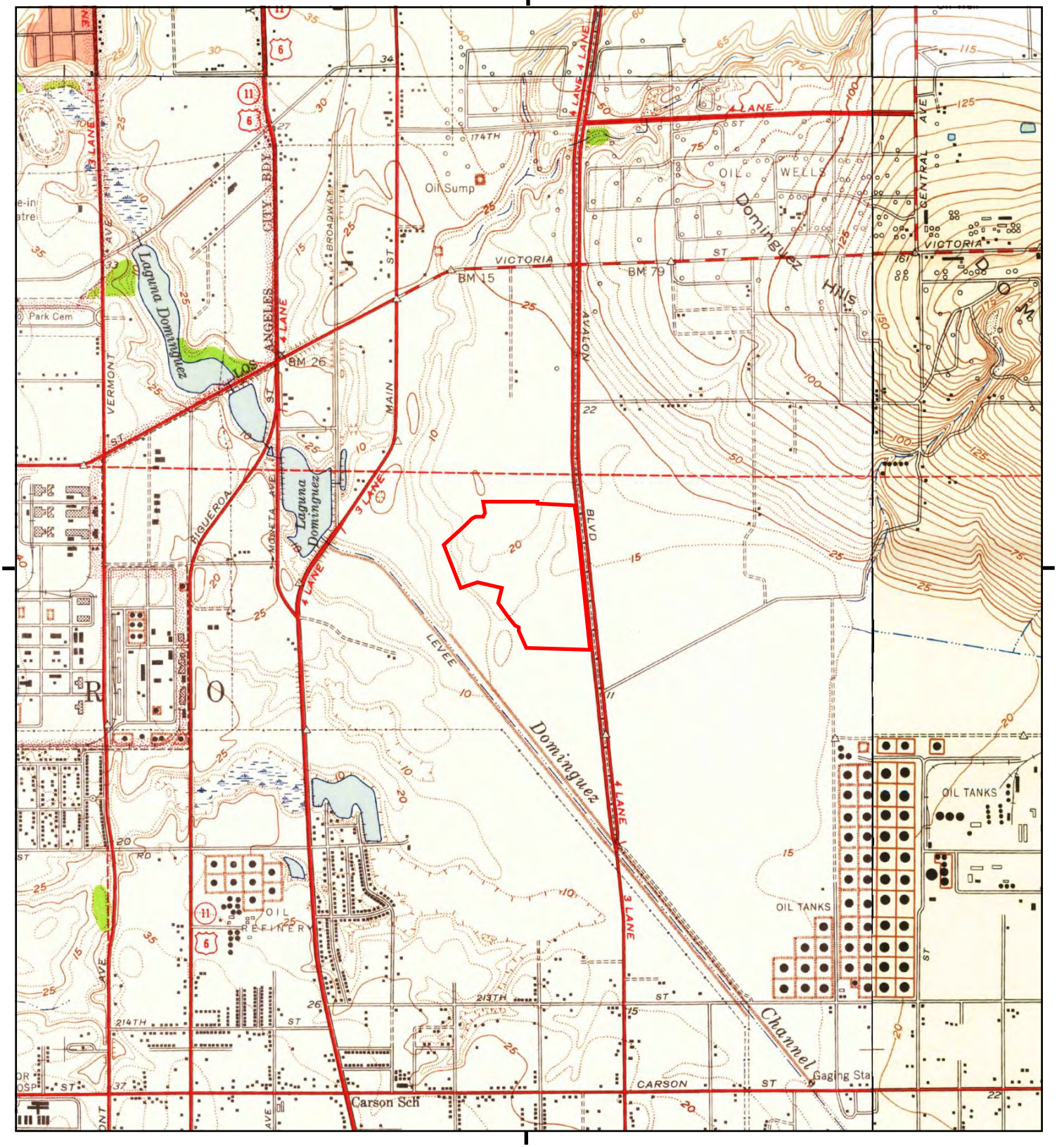
TP, Torrance, 1964, 7.5-minute
NE, South Gate, 1964, 7.5-minute
SE, Long Beach, 1964, 7.5-minute
NW, Inglewood, 1964, 7.5-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N

Historical Topo Map

1949, 1950, 1951



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

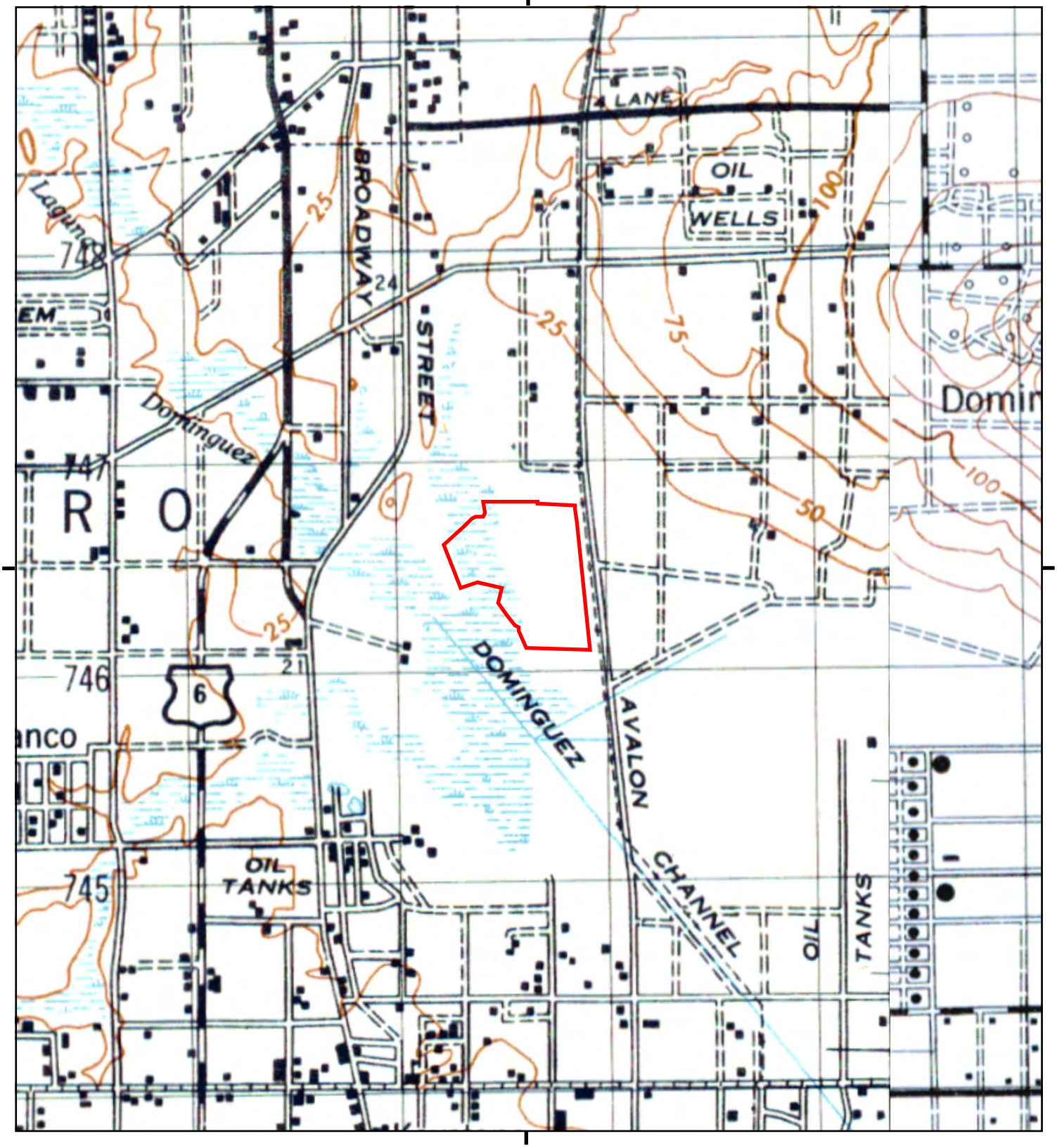
TP, Torrance, 1951, 7.5-minute
NE, South Gate, 1949, 7.5-minute
SE, Long Beach, 1949, 7.5-minute
NW, Inglewood, 1950, 7.5-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N

Historical Topo Map

1947, 1948



This report includes information from the following map sheet(s).

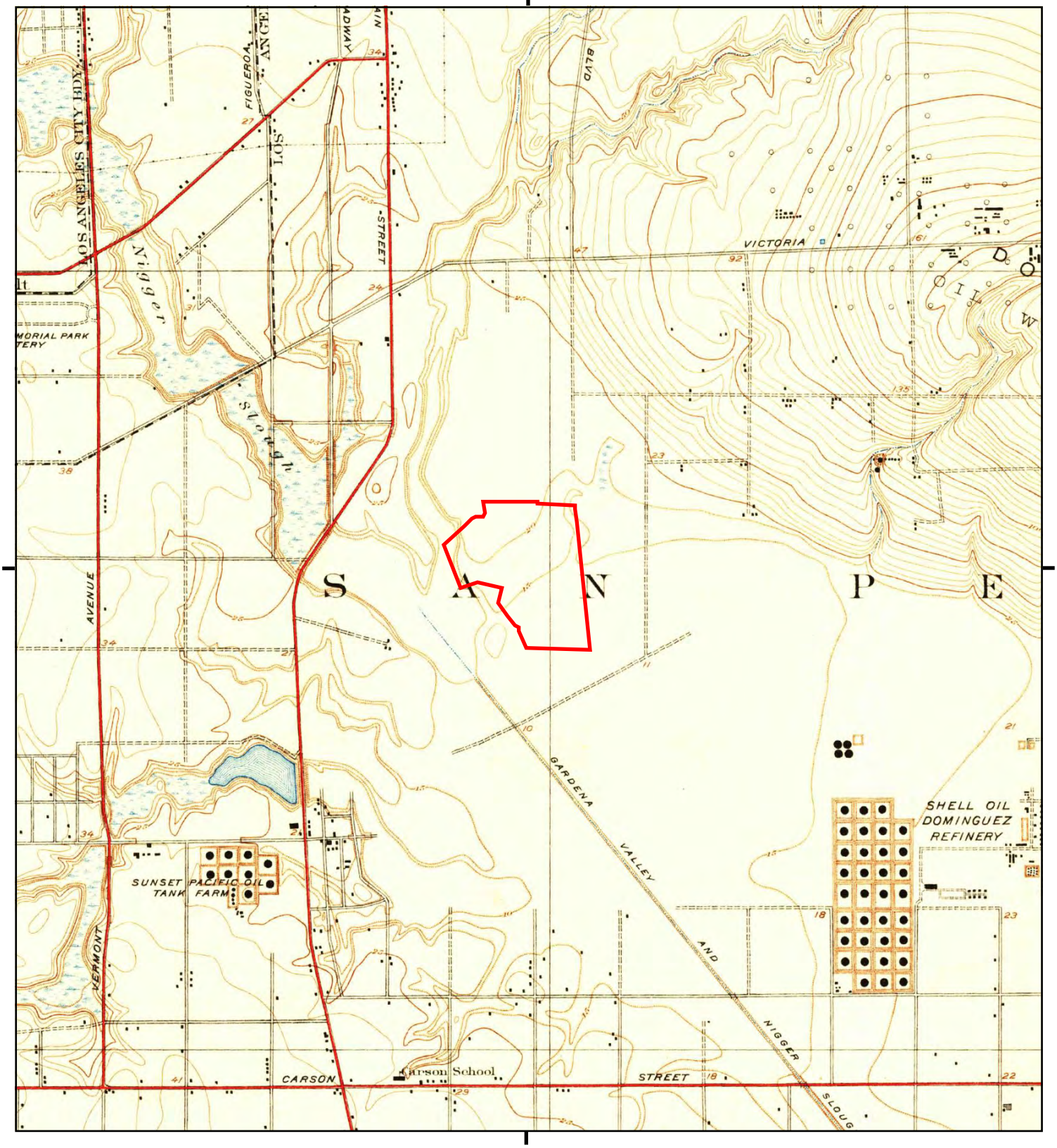
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, REDONDO, 1948, 15-minute
E, DOWNEY, 1947, 15-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

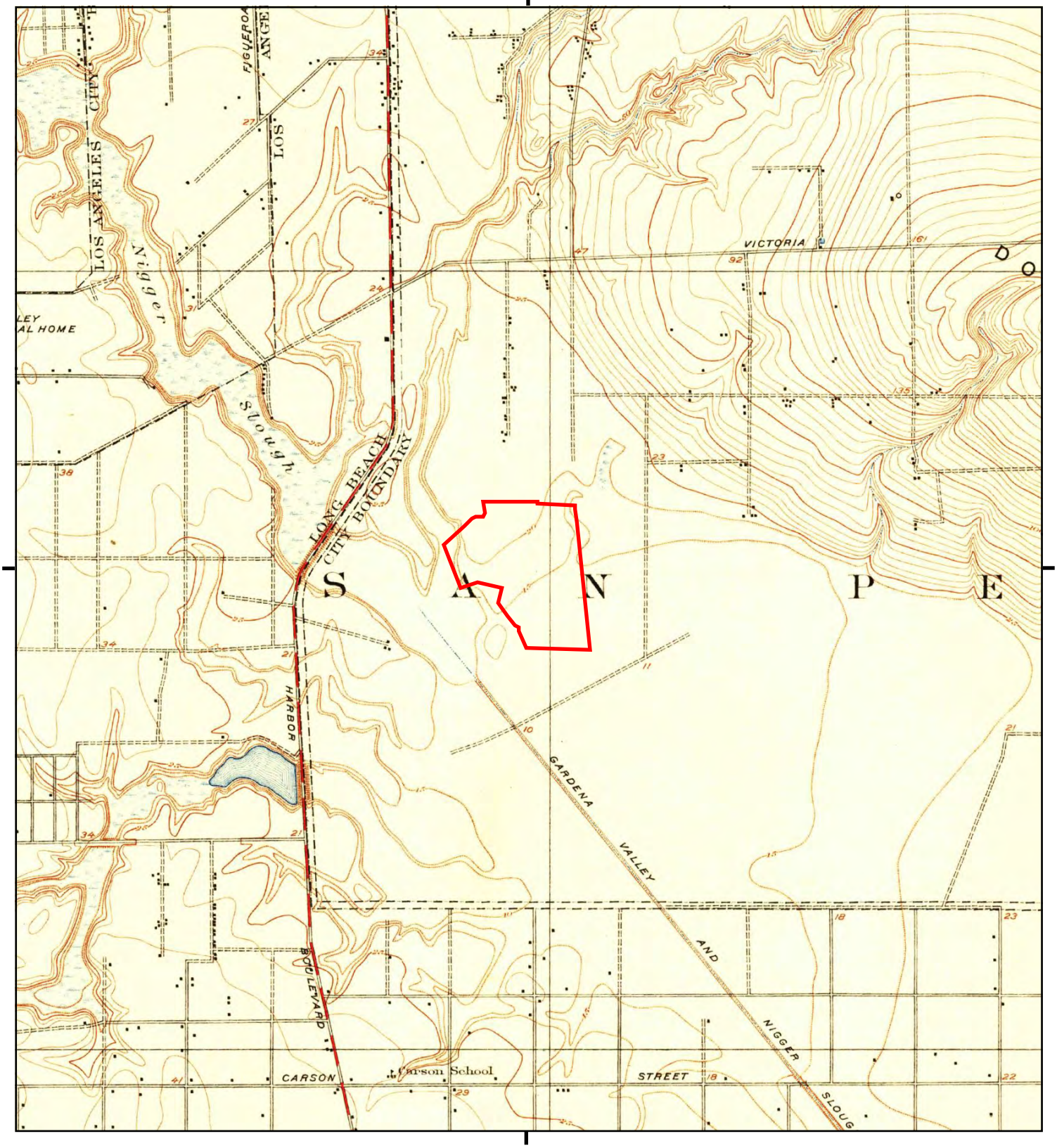
TP, Compton, 1930, 7.5-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N

Historical Topo Map

1924



This report includes information from the following map sheet(s).

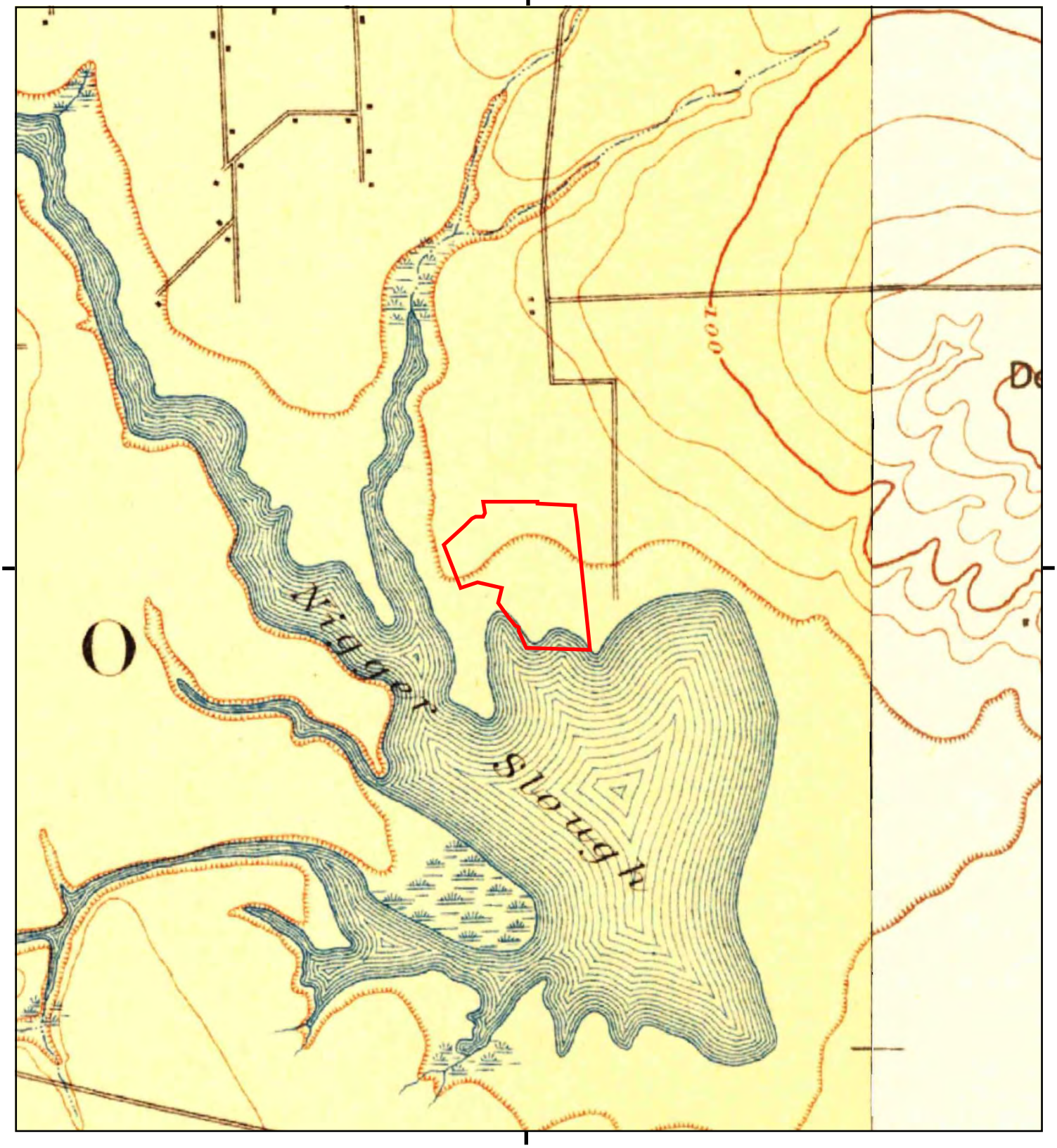
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Compton, 1924, 7.5-minute

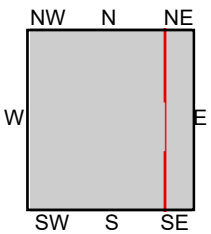
SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



TP, Redondo, 1896, 15-minute
E, Downey, 1896, 15-minute

SITE NAME: Former BKK Carson Dump
ADDRESS: 340 East 192 Street
Carson, CA 90746
CLIENT: GeoSyntec Consultants

N

APPENDIX F

Sanborn Map Report

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746

Inquiry Number: 5315435.3
May 30, 2018

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/30/18

Site Name:

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746
EDR Inquiry # 5315435.3

Client Name:

GeoSyntec Consultants
16644 West Bernardo Drive SUITE 301
SAN DIEGO, CA 92127
Contact: Steven Phillips

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by GeoSyntec Consultants were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 7470-438C-BAFD

PO # SC0918

Project Former BKK Carson Dump PIESA

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 7470-438C-BAFD

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX G

City Directory Abstract Report

Former BKK Carson Dump
340 East 192 Street
Carson, CA 90746

Inquiry Number: 5315435.5
May 30, 2018

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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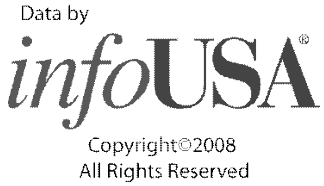


RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2014	EDR Digital Archive	-	-	-	-
	EDR Digital Archive	X	-	X	-
2010	EDR Digital Archive	-	-	-	-
	EDR Digital Archive	X	-	X	-
2006	Haines Company, Inc.	X	X	X	-
2004	Haines Company	-	-	-	-
2003	Haines & Company	-	-	-	-
2000	Haines	-	-	-	-
1999	Haines Company	-	-	-	-
1996	GTE	-	-	-	-
1995	Pacific Bell	X	X	X	-
1992	PACIFIC BELL WHITE PAGES	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1991	Pacific Bell	-	-	-	-
1990	Pacific Bell	X	X	X	-
1986	Pacific Bell	-	-	-	-
1985	Pacific Bell	X	X	X	-
1981	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1980	Pacific Telephone	X	X	X	-
1975	Pacific Telephone	X	X	X	-
1972	R. L. Polk & Co.	-	-	-	-
1969	Pacific Telephone	-	-	-	-
1967	Pacific Telephone	X	X	X	-
1966	Pacific Telephone	-	-	-	-
1965	GTE	-	-	-	-
1964	Pacific Telephone	-	-	-	-
1963	Pacific Telephone	-	-	-	-
1962	Pacific Telephone	-	-	-	-
1961	R. L. Polk & Co.	-	-	-	-
1960	Pacific Telephone	-	-	-	-
1956	Pacific Telephone	-	-	-	-
1955	R. L. Polk & Co.	-	-	-	-
1952	Los Angeles Directory Co.	-	-	-	-
1949	Los Angeles Directory Co.	-	-	-	-
1948	Associated Telephone Company, Ltd.	-	-	-	-
1947	Pacific Directory Co.	-	-	-	-
1946	Southern California Telephone Co	-	-	-	-
1945	R. L. Polk & Co.	-	-	-	-
1944	R. L. Polk & Co.	-	-	-	-
1942	Los Angeles Directory Co.	-	-	-	-
1940	Los Angeles Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Company Publishers	-	-	-	-
1937	Los Angeles Directory Co.	-	-	-	-
1936	Los Angeles Directory Co.	-	-	-	-
1935	Los Angeles Directory Co.	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1933	Los Angeles Directory Co.	-	-	-	-
1932	Los Angeles Directory Co.	-	-	-	-
1931	TRIBUNE-NEWS PUBLISHING CO.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1929	Los Angeles Directory Co.	-	-	-	-
1928	Los Angeles Directory Co.	-	-	-	-
1927	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1926	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-
1924	Los Angeles Directory Co.	-	-	-	-
1923	Los Angeles Directory Co.	-	-	-	-
1921	Los Angeles Directory Co.	-	-	-	-
1920	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

Address	*Type*	*Findings*
19200 Main Street	Client Entered	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

340 East 192 Street
Carson, CA 90746

FINDINGS DETAIL

Target Property research detail.

192ND E

340 192ND E

Year	*Uses*	*Source*
1995	WHITTIER NARROWS GOLF COURSE	Pacific Bell
1990	NATIONAL GOLF & TENNIS INC	Pacific Bell
	VICTORIA GOLF COURSE	Pacific Bell

E 192ND ST

340 E 192ND ST

Year	*Uses*	*Source*
2006	COURSE	Haines Company, Inc.
	GOLFCRSE VICTORIA GOLF	Haines Company, Inc.
	LACOPKS&REC	Haines Company, Inc.
1985	VICTORIA GOLF COURSE	Pacific Bell
1980	Golt Courses Victoria	Pacific Telephone
	LOS ANGELES COUNTY OF PARKS & RECREATION DEPT GOLF COURSES	Pacific Telephone
1975	LOS ANGELES COUNTY OF PARKS & RECREATION DEPT GOLF COURSES	Pacific Telephone
	Victoria	Pacific Telephone
1970	HOSPITALS	Pacific Telephone
	LOS ANGELES COUNTY OF PARKS & RECREATION DEPT	Pacific Telephone
1967	Los Verdes Golf Course	Pacific Telephone
	Victoria Golf Course	Pacific Telephone

FINDINGS

Main Street

19200 Main Street

Year	Uses	Source
2001	GOODYEAR	Haines & Company, Inc.
1995	GOODYEAR TIRE & RUBBER CO BLIMP BASE	Pacific Bell
1990	GOODYEAR TIRE & RUBBER CO BLIMP BASE	Pacific Bell
	GOODYEAR TIRE & RUBBER CO BLIMP BASE GARDENA	Pacific Bell
1985	GOODYEAR TIRE & RUBBER CO THE BLIMP BASE	Pacific Bell
1981	GOODYEAR TIRE & RUBBER CO THE	Pacific Telephone
1980	GOODYEAR TIRE & RUBBER CO THE BLIMP BASE	Pacific Telephone
1976	Blimp Base	Pacific Telephone
	GOODYEAR TIRE & RUBBER CO THE	Pacific Telephone
1975	GOODYEAR TIRE & RUBBER CO THE	Pacific Telephone
1971	Blimp Base	Pacific Telephone
	GOODYEAR TIRE & RUBBER CO THE	Pacific Telephone
1970	GOODYEAR TIRE & RUBBER CO THE BLIMP BASE	Pacific Telephone
1958	B K K CO	Pacific Telephone
1957	B K K CO	Pacific Telephone
1954	B K K COMPANY	R. L. Polk & Co.
1951	S Main Grd Kazarian Co Disposal Yards	Pacific Telephone & Telegraph Co.
1950	BAK DISPOSAL CO	Pacific Telephone

S MAIN ST

19200 S MAIN ST

Year	Uses	Source
2014	GOODYEAR TIRE & RUBBER COMPANY	EDR Digital Archive
2010	GOODYEAR TIRE & RUBBER COMPANY	EDR Digital Archive
	JAVIER ESTRELLA	EDR Digital Archive

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

192ND E

348 192ND E

Year	Uses	Source
1995	WHITTIER NARROWS GOLF COURSE COFFEE SHOP	Pacific Bell
1990	VICTORIA COFFEE SHOP	Pacific Bell

419 192ND E

Year	Uses	Source
1995	AVALON VICTORIA HEAD START	Pacific Bell
1990	LOS ANGELES COUNTY OF	Pacific Bell
	LOS ANGELES COUNTY OF	Pacific Bell
	AVALON VICTORIA HEAD START	Pacific Bell

E 192ND

348 E 192ND

Year	Uses	Source
1981	VICTORIA GOLF COURSE CARSON	Pacific Telephone

E 192ND ST

341 E 192ND ST

Year	Uses	Source
1967	Victoria Park Pool	Pacific Telephone

348 E 192ND ST

Year	Uses	Source
1985	VICTORIA COFFEE SHOP	Pacific Bell
1967	Chapman Harvey golf & coffee shop	Pacific Telephone

419 E 192ND ST

Year	Uses	Source
2006	PARK VICTORIA	Haines Company, Inc.
	+AVALON VICTORIA	Haines Company, Inc.
	+LA COPK&REC	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2006	ARBORTA&BTNC	Haines Company, Inc.
	GRDN LACOPK&RECEL	Haines Company, Inc.
	CAMINO DIST LACO PK&REC	Haines Company, Inc.
1985	FEDERATION OF PRE SCHOOL AND COMMUNITY EDUCATION CENTERS INC HEAD START SCH	Pacific Bell
1980	LOS ANGELES COUNTY OF PARKS & RECREATION DEPT PARKS	Pacific Telephone
	FEDERATION OF PRE-SCHOOL AND COMMUNITY EDUCATION CENTERS INC-HEAD START	Pacific Telephone
1975	LOS ANGELES COUNTY OF PARKS & RECREATION DEPT PARKS	Pacific Telephone

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
340 East 192 Street	2004, 2003, 2000, 1999, 1996, 1992, 1991, 1986, 1972, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1956, 1955, 1952, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
341 E 192ND ST	2014, 2010, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
348 192ND E	2014, 2010, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
348 E 192ND	2014, 2010, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
348 E 192ND ST	2014, 2010, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
419 192ND E	2014, 2010, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
419 E 192ND ST	2014, 2010, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

APPENDIX H

Site Photographs

APPENDIX H – SITE PHOTOGRAPHS

SITE RECONNAISSANCE: Victoria Golf Course Property, Carson, California | **DATE:** 21 June 2018

PHOTOGRAPH 1:

View: Looking south from M.L.K. Jr. Street.

Photo shows the ingress to the Site from M.L.K. Jr. Street. Note the golf course clubhouse/administration area.



PHOTOGRAPH 2:

View: Looking at the western portion of the Site from the southwest Site boundary.

Photo shows golf course conditions. Note the undulating terrain, and stressed vegetation.



PHOTOGRAPH 3:	
View: Looking south from the northern portion of the Site. Photo shows the driving range.	

PHOTOGRAPH 4:	
View: Looking north from the northern portion of the Site. Photo shows the golf cart storage building. Note the landfill gas monitoring well in the foreground.	

PHOTOGRAPH 5:

View: Looking northeast from the northern portion of the Site.

Photo shows the golf cart wash-down area. Note the floor drain and the methane vent riser.



PHOTOGRAPH 6:

View: Looking west from within the covered portion of the golf cart storage area.

Photo shows a methane vent riser located inside the clubhouse facilities.



PHOTOGRAPH 7:

View: Looking north from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows an equipment wash-down bay, an empty plastic tote container, an aboveground storage tank (AST), and a poison storage locker containing fertilizers, herbicides, and fungicides. Two empty and unlabeled 55-gallon drums were observed behind the poison storage locker.

PHOTOGRAPH 8:

View: Looking northeast from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows the 1,500-gallon capacity dual compartment AST containing 500 gallons of diesel fuel and 1,000 gallons of gasoline and within concrete secondary containment. Three 70-gallon capacity tanks containing used oil are within the same secondary containment. Note the flammable storage locker and irrigation pipe storage in the background.

Geosyntec consultants

PHOTOGRAPH 9:

View: Looking north from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.

Photo shows an active air compressor and electrical transformers.



PHOTOGRAPH 10:

View: Looking north from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.

Photo shows stockpiled sand, numerous railroad ties, and a transformer.



PHOTOGRAPH 11:

View: Looking west from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows various 55-gallon drums labeled as non-hazardous waste, fertilizer water. Note the unlabeled and empty 55-gallon drum in poor condition.

PHOTOGRAPH 12:

View: Looking north from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows an unlabeled 55-gallon drum in poor condition, and an open bucket of apparent waste oil. The drum appeared to be partially full.

PHOTOGRAPH 13:

View: Looking southwest from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows an out-of-use, but oily parts washer. Also observed were three 55-gallon drums containing used oil and used gasoline filters. Note the oily staining on the ground surface.

PHOTOGRAPH 14:

View: Looking north from the interior of the garage located in the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows a welding machine and air compressor.

PHOTOGRAPH 15:

View: Looking south from the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows oily staining on bare soil throughout the maintenance shop and maintenance equipment storage area. Note the inter-modal storage container in the background.

PHOTOGRAPH 16:

View: Looking within the inter-modal storage container located in the maintenance shop and maintenance equipment storage area in the northern portion of the Site.



Photo shows supplies for golf course maintenance, including bags of urea, iron, and ammonium sulfate.

PHOTOGRAPH 17:

View: Looking northeast from the northeast portion of the Site.



Photo shows two plastic tanks labelled to have formerly contained liquid fertilizers (500-gallon) and a liquid penetrant (1,000-gallon). The tanks were observed to be empty with the exception of crystalline residue in the tank bottoms. Note the reclaimed water injection system with four turbine pumps in the background.

PHOTOGRAPH 18:

View: Looking north from the eastern Site boundary.



Photo shows erosion observed at a storm drain located along the eastern Site boundary. The erosion undercut the opening of the drain. No buried waste was observed.

PHOTOGRAPH 19:

View: Looking southeast from the intersection of M.L.K. Jr. Street and South Main Street located northwest from the Site.



Photo shows various offsite groundwater and vapor monitoring wells related to the Site, the differential settlement occurring along M.L.K. Jr. Street, the former nursery, and the Goodyear Blimp base airport.

PHOTOGRAPH 20:

View: Looking south from M.L.K. Jr. Street.



Photo shows seepage occurring in areas of the Dominguez Branch Channel offsite near the Site boundary.

PHOTOGRAPH 21:

View: Looking south from the southern boundary of the Victoria Golf Course.

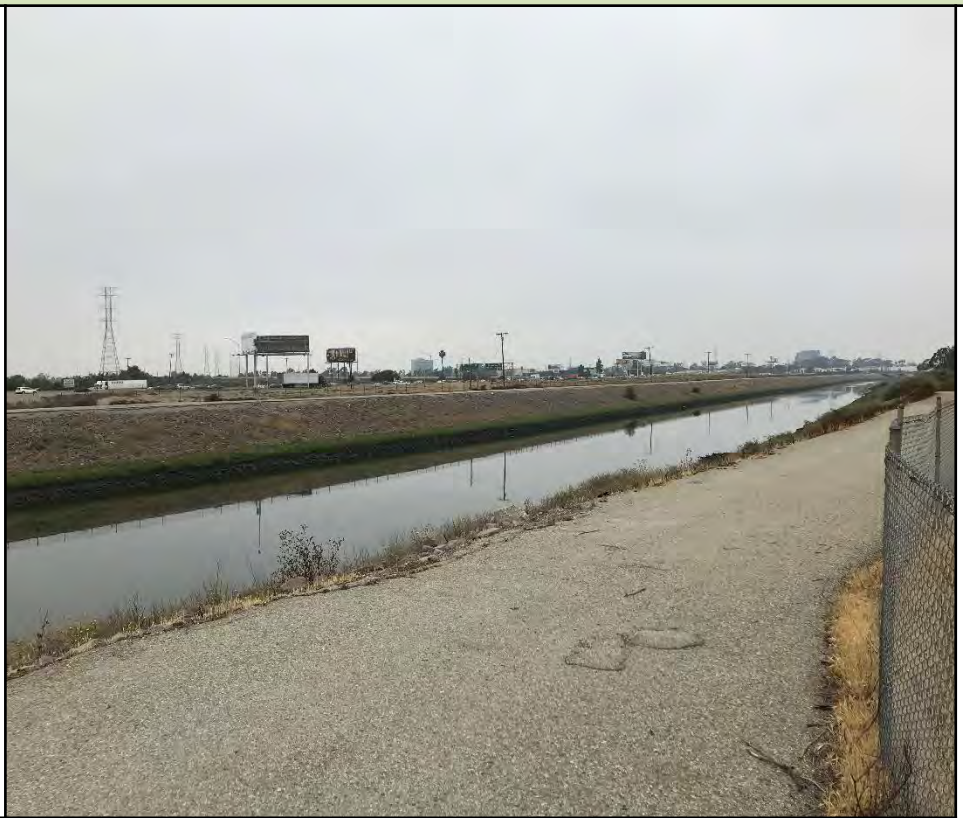
Photo shows East Del Amo Boulevard, the Dominguez Channel, and active recycled water, natural gas, and crude oil pipelines.



PHOTOGRAPH 22:

View: Looking west from the southern boundary of the Victoria Golf Course.

Photo shows vacant land, I-405, and the approximately 250-ft wide, concrete-lined Dominguez Channel. Further west are the former Dominguez Golf Course and the Porsche Driving Experience center (OU-1).



APPENDIX I

Hydrology and Water Quality Report

HYDROLOGY & WATER QUALITY REPORT

for

Carol Kimmelman Athletic and Academic Campus
Carson, California

Prepared For:

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12 April 2019
Langan Project No. 700060401

LANGAN

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1.0 INTRODUCTION

The purpose of this report is to inform the Hydrology and Water Quality evaluations of the Environmental Impact Report for the Carol Kimmelman Athletic & Academic Campus project (the "Project"). This report identifies potential surface water hydrology, water quality and flood hazard impacts that may be associated with the development of the Project. The report provides technical information and responds to the following relevant thresholds of significance listed in Appendix G of the California Environmental Quality Act ("CEQA") Guidelines relating to hydrology and water quality:

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would:
    - result in substantial erosion or siltation on- of off- site?
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?
    - Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
    - Impede or redirect flood flows?
d) Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

2.0 PROJECT DESCRIPTION

2.1 Site Description

The Project Site includes approximately 87 acres (Site) of the northeastern portion of the existing approximately 187 acre Victoria Golf Course (see Figure 1 – Site Vicinity Map). The County of Los Angeles (County) owns the Site which the County currently leases for the operation of a golf course. Prior to the Victoria Golf Course's current use as a County golf course, it was the site of a portion of the former Ben K. Kazarian (BKK) landfill, which was approximately 353 acres and was operated as a Class II municipal solid waste landfill from 1948 to approximately 1959. The California Department of Toxic Substances Control (DTSC) is overseeing the former landfill's remediation. The entire former landfill site is divided into Operable Units (OU) focused on two separate remediation operations, of which the Victoria Golf Course site is OU-2.

The Site contains existing infrastructure within and adjacent to its boundaries including water, sewer, stormwater drainage, electric, gas and telecommunications. The County owns and operates the facility which includes sanitary sewer and stormwater drainage. Domestic water is

operated and maintained by California Water Service Company (CWSC). Recycled water is operated and maintained by West Basin Municipal Water District (WBMWD).

2.2 Proposed Development

The Project involves the redevelopment of the Site for public recreation purposes (see Figure 2 for the current architectural concept). Project components would include a tennis center, soccer center, learning center and various support buildings. Features of the Project include:

Tennis Center

- The tennis center component would occupy approximately 28 acres developed with a 23,000 square foot welcome center, a spectator venue with up to 12 hard courts and 1,200 seats, 50 tennis courts of various sizes, a 5,000 square foot administration building, a 13,000 square foot player development building, and outdoor training spaces including a 100-meter sprint track, basketball courts, a training turf, a maintenance facility, and vehicle/ bus parking.

Learning Center

- Adjacent to the tennis center would be an approximately 25,000 square foot learning center that would include classrooms, quiet rooms, staff support for homework, counseling, and tutoring.
- The welcome center and learning center will be located in the main entrance area within the northwest portion of the Site.

Soccer Center

- The soccer center component would occupy approximately 58 acres developed with six full-sized natural grass soccer fields, two full-sized artificial turf soccer fields, and two natural grass multi-purpose fields.

Other Improvement:

- Additional site improvements would include asphalt paved parking lots and two additional overflow parking areas between the fields and South Avalon Boulevard.
- Miscellaneous support buildings, including maintenance facilities, restrooms, and sheds, will be constructed throughout the site.

3.0 ENVIRONMENTAL SETTING

3.1 Surface Water Hydrology

3.1.1 Regional

The Project Site is located within the greater Los Angeles area within the Dominguez Channel Watershed. A brief description of the watershed, as provided in Section 1.1 of

the Coordinated Integrated Monitoring Program (2014 draft) by the Dominguez Channel Watershed Area Management Group, is summarized below.

The Dominguez Channel Watershed, located in the southern portion of Los Angeles County, is about 133 square miles in size; 120 square miles is land, and the remainder consists of the Los Angeles and Long Beach Harbors. Approximately 72 square miles of the land area drains to the Dominguez Channel, and the remaining 48 square miles drains to the Los Angeles/Long Beach Harbors and Machado Lake. Its boundaries range from the Los Angeles International Airport to the Los Angeles Harbor. The Dominguez Channel Watershed is a predominately urban area with a mix of residential, commercial, and industrial use. It receives about 12.1 inches of rain each year, mostly during the winter season.

The relevant Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site is Panel 1935 of 2350, Map Number 06037C1935F, dated September 26, 2008 (see Appendix A). Most of the Site is located within Zone X "Other Areas," identified on the FIRM as "areas outside the 0.2% annual chance floodplain." Small perimeter portions of the site are located within Zone X "Other Flood Areas," identified on the FIRM as "areas of 0.2% annual chance of flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood." Zone X areas have moderate to low risk flood and do not have FEMA requirements for flood protection. The Dominguez Channel and an open branch channel that are located off of the Project Site are classified as Zone A, a Special Flood Hazard Area (without base flood elevation).

3.1.2 Local

Underground storm drainage facilities located off-site along Martin Luther King Jr. Street and South Avalon Boulevard are owned and maintained by the County and the County Flood Control District. Stormwater runoff enters catch basins and underground storm drainage pipes convey the runoff to the Del Amo Channel. To the west of the Site there is an existing Los Angeles County open branch channel. This channel and the Del Amo Channel connect to the downstream Dominguez Channel. Figure 3 – Existing Drainage Features and the existing storm drain record documents in Appendix B show the elements of the existing drainage system.

3.1.3 On-Site

Approximately 70% of the Site discharges stormwater runoff to the east to the existing South Avalon Boulevard storm drain system and the Del Amo Channel. The remaining 30% discharges stormwater runoff to the west to the existing County branch channel. Approximately 7% of the Site has impervious cover including buildings, paved parking lots, streets and cart paths and tennis courts (see Figure 4 – Existing Drainage Map). The remainder of the Site is the vegetated golf course area, however, due to the existence of the landfill soil cover (consisting of sandy silt, clayey sand, sandy clay and clay with the predominant soil type as sandy clay) under the vegetation these areas are also characteristic of impervious area.

Peak runoff rates for the 50-year storm event were calculated for the pre-construction (existing) and post-construction (proposed) conditions using the engineering application HydroCalc consistent with the Los Angeles County Hydrology Manual. This software, as provided by Los Angeles County, utilizes hydrograph data to determine the peak runoff rate for a particular watershed. At the location of the Site, the 24-hour 50-year rainfall depth is 6.2 inches, the soil type is 16, and the fire factor is not applicable (see Appendix C and page 55 of the Los Angeles County Hydrology Manual).

3.2 Surface Water Quality

3.2.1 Regional

The Site is tributary to the Dominguez Estuary (unlined portion below Vermont Ave). Currently, the Dominguez Estuary is listed on the California 303(d) list as a Category 5 water segment. The Category 5 criteria are as follows: "A water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment." (2014 and 2016 California 303(d) List of Water Quality Limited Segments). The water quality impairments listed for the Dominguez Estuary are Benthic Community Effects, Benzo(a)anthracene, Benzo(a)pyrene (3,4-Benzopyrene-7-d), Chrysene(C1-C4), Copper, Indicator Bacteria, Lead, PCBs (Polychlorinated biphenyls), Phenanthrene, Pyrene, and Toxicity.

As discussed further below, Section 303(d) of the 1972 Federal Clean Water Act requires States to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each State must submit an updated list, called the 303(d) list, to the U.S. EPA every two years.

In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment and establishes a priority for developing a control plan to address the impairment. The list also identifies water bodies where 1) a Total Maximum Daily Load (TMDL) has been approved by U.S. EPA and an implementation is available, but water quality standards are not yet met, and 2) water bodies where the water quality problem is being addressed by an action other than a TMDL and water quality standards are not yet met.

Once a water body is placed on the 303(d) list, Regional Board staff evaluates the nature of the impairment and begins developing a TMDL, if appropriate and necessary. For each TMDL developed, staff will also develop an implementation or water quality control plan for each water body and associated pollutant/stressor on the list. The TMDL and the implementation plan serve as the means to attain and maintain water quality standards for the impaired water body.

On May 5, 2011, the Regional Board adopted Resolution No. R11-008, amending the Water Quality Control Plan for the Los Angeles Region to incorporate a TMDL for toxic pollutants in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters. The TMDL's are documented in the March 2014 Contaminated Sediment

Management Plan: Dominguez Channel Estuary. An excerpt of this plan is included as Appendix D.

The Dominguez Channel Watershed Management Area contains two Superfund sites, the Montrose Chemical Corporation site and the Del Amo Facility site. The Montrose site manufactured DDT from 1947 to 1982. The compound is still present in soils around the Montrose site and may be carried by stormwater runoff if exposed. The site however, is currently paved and includes a maintenance plan under Initial Action, taken under USEPA oversight in 1985. The Del Amo Facility site was once the center of large-scale production of synthetic rubber that included a styrene and a butadiene plant. Groundwater and soils in the area are contaminated with volatile organic compounds (VOCs), PAHs, and minor amounts of pesticides, PCBs, and heavy metals. Most of the Del Amo facility has been redeveloped into an industrial business park and surficial soils are generally not exposed (City of Los Angeles 2015).

3.2.2 Local

In general, urban stormwater runoff occurs following precipitation events with the rate and volume of runoff flowing into a drainage system dependent on the intensity and duration of the rainfall event. Contaminants that may be found in stormwater from developed areas include sediments, trash, bacteria, metals, nutrients, organics, and pesticides. The sources of contaminants include surface areas where precipitation falls, as well as the air it falls through. Contaminants on surfaces such as roads, maintenance areas, parking lots, and building, which are usually contained in dry weather conditions, may be carried by rainfall into drainage systems.

3.2.3 On-site

The Remedial Action Plan for Soil and Landfill Gas Media (Burns McDonnell, "Remedial Action Plan for Soil and Landfill Gas Media, Former BKK Landfill, Carson Dump, Operable Unit 2, 340 East 192nd St., 19202 South Main St., 19200 South Main St., City of Carson, California 90248" dated June 2016) concluded that the low and undetectable levels of contaminants of potential concern in the surface water runoff and the sediment within the surface water runoff from the Site represented an insignificant ecologic or human health risk.

The Project Site currently has no means for the treatment of stormwater runoff. The existing stormwater pollutant sources include the building roof, on-site pavements, maintenance areas, roadways and the landscaped golf course areas. The pollutants of concern from the areas include a mix of sediment, trash, bacteria, metals, nutrients, organics and debris. The golf course areas absorb a small portion of the direct rainfall and the trees and shrubs intercept some rainfall before it reaches the ground (initial abstraction), hence reducing the amount of stormwater runoff from these areas. However, due to the landfill soil cover beneath the golf course vegetation, most of the direct rainfall becomes stormwater runoff. The inclusion of the low impact development best management practices (LID-BMPs) into the Project, both during and post

construction, will reduce the pollutant loading from the Site since no pollutant reduction measures currently exist.

3.3 Groundwater

3.3.1 Regional and Local

The Site is located within the Palos Verdes Peninsula, which consists of an extensive, primarily submarine terrain where Middle Miocene and younger sediments lie on a tectonically disrupted basement of Mesozoic Catalina Schist. More specifically, the Site is located in a northwest-trending coastal Torrance Plain within the West Coast Basin. The Torrance Plain is bounded by the Pacific Ocean to the west and south, the Los Angeles Basin to the north, the Coastal Plain to the east, and the Santa Ana Mountains to the southeast.

The regional groundwater is defined by the Bellflower Aquitards (upper, middle, lower-middle and lower units), Gage Aquifer, Gage Lynwood Aquitard, Lynwood Aquifer and Silverado Aquifer. These hydrostratigraphic units extend from near-surface to over 329 feet below ground surface and overall groundwater flow is to the south.

3.3.2 On-Site

According to the Urban Water Management Plan prepared by the California Water Service for the Dominguez District in June 2016, groundwater is approximately 40 to 50 feet below sea level at the Site. Since the proposed site elevations range from about 10 to 35 feet above sea level, groundwater depth is estimated to range from about 50 to 85 feet below grade. However, the groundwater monitoring well gauging data from the Final RI/FS BKK Landfill OU-2 Report (Leighton Consulting, Inc., "Final Remedial Investigation and Feasibility Study for Soil and Gas Media Former BKK Landfill, Carson Dump Operable Unit 2, City of Carson, California" dated June 2014) indicates the groundwater beneath the site varies from approximately 9 feet below ground surface to 43 feet below ground surface.

The Dominguez Water Company maintained a leased well-site at OU-02 for water production well DWC-11 (State well identification number 834 and Watermaster well identification number 4S/13W-5 L1). The RI/FS indicates that the well is abandoned (only reported operational from 1919 to 1959) and is no longer visible.

There is limited to no groundwater-surface interaction due to the presence of the landfill soil cover, nor is there evidence of migration of landfill contaminants to surface water. As discussed above, the Site is located within OU-2. A Remedial Action Plan associated with soil and soil gas contamination was completed in June 2016. The DTSC has previously identified several VOCs in the groundwater beneath the Site including vinyl chloride, dichloroethane, dichloroethene, trichloroethene and chlorobenzene. (DTSC Settlement Agreement and Consent Order (State of California, California Environmental Protection Agency, Department of Toxic Substances Control, "Docket No. HAS-CO 05/05-114 Settlement Agreement and Consent Order" dated May 2006) As documented in the

DTSC acceptance of the RI/FS (State of California, California Environmental Protection Agency, Department of Toxic Substances Control, "Review of Draft Revised Remedial Investigation and Feasibility Study for Soil and Gas Media" dated June 2014) and acknowledged in the Final RI/FS, it is understood that the results of groundwater samples collected under DTSC-approved workplans and monitoring programs and potential groundwater response actions will be addressed by DTSC separately from the 2016 Remedial Action Plan.

3.4 Regulatory

The primary statutes that govern the activities under the Project that may affect water quality are the federal CWA (33 U.S.C. 1251 et seq.) and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (California Water Code, Section 13000 et seq.). These acts provide the basis for water quality regulation in the Project area.

3.4.1 Federal

Clean Water Act

The Clean Water Act (CWA) (33 U.S.C. 1251 et seq.) established basic guidelines for regulating discharges of pollutants into the waters of the U.S. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA. The CWA provides the legal framework for several water quality regulations including, for example, the National Pollutant Discharge Elimination System (NPDES) permits. While most of the regulatory responsibilities under the CWA fall under the EPA, the United States Army Corps of Engineers has primary jurisdiction for implementation of the wetlands and streambed alterations regulatory functions under the Act.

The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 U.S.C. 1342). In the state of California, the EPA has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Section 303(d) of the CWA requires identification and listing of water-quality limited or "impaired" waterbodies where water quality standards and/or receiving water beneficial uses are not met. As discussed above, once a water body is listed as "impaired", TMDLs must be established for the pollutants or flows causing the impairment (33 United States Code [USC] Section 1313(d)(c)). Once established, the TMDL allocates the loads among current and future pollutant sources to the water body. In general, where urban runoff is identified as a significant source of pollutants causing the impairments and is subject to load allocations, implementation of, and compliance with the TMDL requirements are administered through a combination of individual Industrial Stormwater Permits, the General Industrial and General Construction Stormwater Permits, and the County of Los Angeles' municipal stormwater NPDES program, specifically through the Municipal

Separate Storm Sewer System (MS4) Permit issued to the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities.

Safe Drinking Water Act

Under the Safe Drinking Water Act, the EPA sets drinking water standards referred to as the National Primary Drinking Water Regulations, 40 CFR 141, and the National Secondary Drinking Water Regulations, 40 CFR Par 143. These regulations set maximum contaminant levels (MCLs) for substances in drinking water.

3.4.2 State

Port-Cologne Water Quality Control Act

The Porter-Cologne Act of 1967 (California Water Code, Section 13000 et seq.) requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect state waters. The SWRCB establishes statewide policy for water quality control and provides oversight of the RWQCBs' operations. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state could cause pollution or nuisance, including impacts to public health and the environment.

Actions that involve, or are expected to involve, discharge of waste are subject to water quality certification under Section 401 of the CWA (e.g., if a federal permit is being sought or granted) and/or waste discharge requirements (WDRs) under the Porter-Cologne Act. Chapter 4, Article 4 of the Porter-Cologne Act (California Water Code, Sections 13260–13274), states that persons discharging or proposing to discharge waste that could affect the quality of waters of the state (other than into a community sewer system) shall file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law. For other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as isolated wetlands), WDRs are required and are issued exclusively under state law. WDRs typically require many of the same BMPs and pollution control technologies as required by NPDES-derived permits. Further, the WDRs' application process is generally the same as for CWA Section 401 water quality certification.

As discussed above, the CWA requires stormwater discharges to be in compliance with an NPDES Permit. In California, the SWRCB and its RWQCBs administer the NPDES permit program. The RWQCB also issues WDRs that serve as NPDES permits under the authority delegated to the RWQCBs, under the CWA.

The SWRCB has issued a statewide NPDES General Permit for stormwater discharges associated with construction activities. Projects that disturb land equal to or greater than 1.0 acre are required to file a Notice of Intent to discharge under the Construction General Permit. The Construction General Permit (CGP) requires the development and

implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes Best Management Practices (BMPs) the discharger would use to eliminate or reduce pollutants in stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the CGP.

Stormwater discharges to the municipal separate storm sewer system are regulated by the Los Angeles Regional Water Quality Control Board under Order Number R4-2012-0175, NPDES Permit N0. CA S004001 (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach). This permit is discussed further below.

Pursuant to the requirements set forth by Order No. R4-2012-0175, MS4 NPDES Permit, the Dominguez Channel Watershed Management Area Group (Watershed Management Group) developed the Dominguez Channel Enhanced Watershed Management Plan. The plan outlines a series of mitigation measures required to improve water quality, including the construction of regional stormwater detention and groundwater recharge areas. The Watershed Management Group incorporated applicable BMPs into the Enhanced Watershed Management Plan to address the various TMDLs associated with the Dominguez Channel.

California Code of Regulations, Title 22

Groundwater quality delivered for public supply is regulated under the California Domestic Water Quality and Monitoring Regulations (Title 22, Division 4, Chapter 15 of the California Code of Regulations). Along with implementing the federal Safe Drinking Water Act regulations detailed above, these regulations identify primary and secondary drinking water standards for public drinking water supplies in the state.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) provides a framework for the sustainable management of groundwater supplies by local authorities. The SGMA requires the formation of local groundwater sustainability agency (GSA) to assess local water basin conditions and adopt locally-based management plans. The SGMA provides 20 years for GSAs to implement plans and achieve long-term groundwater sustainability, and protects existing surface water and groundwater rights. The SGMA provides the local GSAs with the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. Furthermore, under the SGMA, GSAs responsible for high- and medium-priority basins must adopt groundwater sustainability plans within five to seven years, depending on whether the basin is in critical overdraft.

3.4.3 Local

Municipal NPDES Permit

The Los Angeles Regional Water Quality Control Board (Regional Water Board) adopted Order No. 90-079 (1990 MS4 Permit), which was the first MS4 permit for the County and incorporated areas therein. On December 13, 2001, the Regional Water Board adopted Order No. 01-182 (2001 MS4 Permit), which replaced the 1990 MS4 Permit and regulated stormwater and non-stormwater discharges within the coastal watersheds of the County, and applied to the Los Angeles County Flood Control District, the unincorporated areas of Los Angeles County under County jurisdiction with the exception of a portion of Antelope Valley including the Cities of Lancaster and Palmdale and the City of Avalon, and 84 cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach. The 2001 MS4 Permit was subsequently amended several times to incorporate new provisions and requirements.

As part of the 2001 MS4 Permit, the County was required to comply with the Standard Urban Stormwater Mitigation Plan (SUSMP). In September 2002, the County developed the SUSMP Manual to comply with the requirements of the 2001 MS4 Permit. The SUSMP Manual outlined BMPs to be incorporated into design plans for certain categories of new development and redevelopment projects. The County subsequently developed the 2004 Design Manual, which was updated in 2010 (2010 Design Manual) and the 2009 LID Manual to further enhance its stormwater management efforts for new development and redevelopment projects.

In October 2008, the County adopted an LID Ordinance into the Los Angeles County Code Title 12, Chapter 84 to require the use of LID principles in all development projects except road and flood infrastructure projects. With the 2012 MS4 Permit, it became necessary for the County to modify this ordinance to reflect the new stormwater runoff water quality and hydromodification requirements for new development and redevelopment projects. In November 2013, the County amended the Los Angeles County Code Title 12, Chapter 84 to incorporate the requirements of the 2012 MS4 Permit. The November 2013 LID Ordinance became effective December 5, 2013, and requires that all Designated, Non-Designated, street and road construction, and single-family hillside home projects comply with Los Angeles County Code Title 12, Chapter 84. The 2014 County LID Standards Manual was prepared to complement and be consistent with the November 2013 LID Ordinance requirements.

The County LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The LID Standards Manual addresses the following objectives and goals:

- Lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters, and other water bodies;

- Minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly-designed, technically-appropriate BMPs and other LID strategies; and
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly-designed, technically-appropriate hydromodification control development and technologies.

Basin Plan

The Los Angeles Regional Water Quality Control Board (RWQCB) has adopted the Los Angeles Regional Water Quality Control Board Basin Plan (Basin Plan), which identifies existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. The Los Angeles RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan to implement plans, policies, and provisions for water quality management. The existing and proposed beneficial uses of waterbodies downstream of the Site include: municipal and domestic supply (MUN); warm freshwater habitat (WARM), wildlife habitat (WILD), threatened or endangered species (RARE), recreation (REC-1, REC-2), Commercial and Sport Fishing (COMM), Estuarine Habitat (ES), Marine Habitat (MAR), Migration of Aquatic Organisms (MIGR), Rare, and Spawning, Reproduction, and/or Early Development (SPWN), and navigation and uses for shipping or transportation by private, military , or commercial vessels (NAV) (City of Los Angeles 2015).

4.0 ANALYSIS OF PROJECT IMPACTS

4.1 Methodology

We reviewed information about the Site including location, topography, soil types, impervious and pervious surfaces, surface runoff direction and rate, groundwater, and adjacent storm drain infrastructure from available resources to understand the existing (i.e., pre-development) conditions. The development characteristics of the Project, as defined in the Project Description and on the Concept Plans, were extracted to understand the proposed (i.e., post-development) conditions. Within the regulatory framework previously described, the hydrology and surface water quality aspects of the Project were evaluated by comparing the existing and proposed pervious/impervious coverage conditions and preliminary peak stormwater runoff rates and volumes. The Hydrograph Method, implemented through Los Angeles County's HydroCalc software, was used to compute the preliminary peak stormwater runoff rates. The analysis of the potential impacts regarding groundwater was based on reviewing existing groundwater uses and conditions and evaluating the potential impacts of the proposed Project on those uses and conditions. Based on the results, the potential impacts were assessed and design recommendations were provided to address and mitigate potential hydrology and water quality impacts.

4.2 Surface Water Hydrology

4.2.1 Construction Impacts

Stormwater runoff from the Site is currently uncontrolled. As discussed in Section 4.2.2 below, it is anticipated that nearly the entire Site will be disturbed for the construction of the Project, which includes greater than 1 acre of land disturbance necessitating the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would begin when construction commences and before any site clearing or demolition activity. Construction Best Management Practices (BMPs) would be designed and maintained as part of the implementation of the SWPPP in compliance with the General Permit. The Project would include temporary SWPPP controls to address surface water hydrology during construction. The SWPPP control measures would be designed to convey the 25-year and 50-year frequency rainfall events from the Site.

From a hydrology perspective, the existing cap over the landfill will generally remain and the Project grading would include compaction and the importing of fill to the Site to generally raise site grades. The construction of the Project would include a new stormwater management system, including treatment and conveyance, to remove stormwater runoff from the Project Site. The new on-site storm drains would be designed and sized to provide flood protection for up to a 50-year frequency storm event. Based on the site plan, it is anticipated that on-site storm drains would connect to the existing County storm drainage facilities in Martin Luther King Jr Street, South Avalon Boulevard and the open branch channel. Prior to obtaining building permits, detailed hydrology reports based on the building final design will be prepared and submitted to the County for approval of the proposed drainage facilities consistent with the County Hydrology Manual. The construction of the new draining facilities would be completed in a manner and sequence that would preclude flooding.

The majority of the proposed storm drain facilities would be constructed within the Site, with the exception of the lateral connections to the public storm drain systems in Martin Luther King Jr Street and South Avalon Boulevard. Based on the location of the conceptual driveway access into the Site from South Avalon Boulevard the existing drainage structure located opposite the Elsmere Drive intersection, along the west side of South Avalon Boulevard, may need to be relocated. The existing catch basin structure collects surface drainage from the street and includes the existing 54 inch RCP storm drain lateral from the Site to the existing 78 inch RCP storm drain in South Avalon Boulevard.

Construction impacts, including but not limited to street traffic detouring and control, are anticipated along Martin Luther King Jr Street and South Avalon Boulevard as part the offsite stormwater infrastructure connections for the Project. Most construction impacts are expected to be confined to trenching and would be temporary in nature.

With the preparation and implementation of a SWPPP for the Project in accordance with the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit, 2012-0006-DWQ) and development of a new on-site storm system consistent with the County Hydrology Manual, the construction impacts to surface water hydrology would not substantially alter the existing drainage pattern of the Site or area, in a manner which would result in substantial erosion or siltation on or off-site, substantially increase the rate of surface runoff in a manner that would result in flooding, or create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems and, thus, impacts would be less than significant.

4.2.2 Operational Impacts

The Project includes a sport and academic complex with a learning center, tennis center, soccer center, parking, and site improvements. The existing golf course and open space areas would be replaced by new buildings and open space amenities, including green spaces, parking lots and other public areas. The Site area is about 87 +/- acres in size. Approximately 70% of the Site discharges stormwater runoff to the east to the existing South Avalon Boulevard storm drain system and the Del Amo Channel. The remaining 30% discharges stormwater runoff to the west to the existing County open branch channel. Peak runoff rates for the 50-year storm events were calculated for the pre- and post-construction conditions using the engineering application HydroCalc. This software, provided by Los Angeles County, utilizes hydrograph data to determine the peak runoff rate for a particular watershed. At the location of the Site, the 24-hour 50-year rainfall depth is 6.2 inches, the soil type is 16, and the fire factor is not applicable (see Appendix C and page 55 of the Los Angeles County Hydrology Manual).

The 50-year peak flow rates and 24-hour runoff volume from the Site were estimated for the pre-development condition and the post-development condition without any on-site stormwater management (see Figure 4 and Figure 5) and the following Table A.

Table A
Peak 50-year Stormwater Flow Rates and Volume

Condition	Peak Q_{50} (cfs)	24-Hour Volume (acre-ft)
Pre-Development	178.2	31.9
Post- Development	215.2	33.8

The post-development peak 50-year flow and 24-hour volume is currently shown as greater than the pre-development peak flow and volume. These estimates provided do not take into account any on-site stormwater management or treatment, evapo-transpiration and attenuation that would occur within the proposed new on-site LID systems. Prior to obtaining building permits, detailed hydrology reports based on the building final design will be prepared and submitted to the County for approval of the proposed drainage facilities consistent with the County Hydrology Manual.

The stormwater runoff from the completed Project would be conveyed to the same existing infrastructure, which includes the existing County branch channel to the west of the Site and the existing infrastructure in Martin Luther King Jr. Street and South Avalon Boulevard to the east. All stormwater runoff from the Site is eventually conveyed to the Dominguez Channel.

The final stormwater management for the Project would be designed to reduce the post-construction peak flow rates to be less than or equal to the pre-construction peak runoff rates for the 50-year design storm event through the incorporation of on-site sustainable stormwater design and treatment measures as described in Section 4.3.2. With the application of these measures, it is estimated that the proposed project would result in an overall decrease in peak flow rate leaving the Site from approximately 215 cubic feet per second (cfs) to less than approximately 178 cfs. The stormwater volumes will also be reduced to less than the pre-development quantity through the sustainable stormwater measures.

The Project would result in similar peak flow conditions for both the 25 year and 50 year rainfall events. With the development of the drainage facilities consistent with the County Hydrology Manual, the Project would not increase the rate or amount of surface runoff in a manner that would result in flooding, nor create nor contribute stormwater runoff which would exceed the capacity of the existing stormwater drainage conveyance systems downstream of the Site. Further, as discussed above, Project structures would be located in "areas outside the 0.1% annual chance floodplain" (FIRM Number 06037C1935F). Therefore, the Project would not place structures within a 100-year flood hazard area and would not expose people or structures to a significant risk involving flooding. Therefore, the impacts with respect to surface water hydrology would be less than significant.

4.3 Surface Water Quality

4.3.1 Construction Impacts

Stormwater runoff from the Site is currently untreated. The Project would include temporary SWPPP controls to address and mitigate water quality during construction and permanent SUSMP BMP measures to address and mitigate water quality post-development. This combination of temporary and permanent management and treatment of stormwater would have a positive impact on water quality. The following summarizes the key elements of the SWPPP.

During construction, the SWPPP would address construction impacts, especially during soil disturbing activities when soils are exposed to wind, rain and concentrated flows that cause erosion, to minimize the transmission of sediment into the separate storm sewer system (MS4) and the adjacent waterways. The proper usage and storage of common construction materials such as vehicle fluids (oil, grease, etc.), asphalt concrete and Portland cement concrete, paints, solvents and thinners, metals and plated products and fertilizers would also be addressed. Finally, the SWPPP would address construction-related waste such as wastewater from vehicle cleaning operations, trash from material packaging, employee's meal breaks, slurries from sawing and grinding operations,

wastewater/waste from concrete washout operations and sanitary waste. The SWPPP measures would not be removed until the new stormwater system is constructed and operational and the disturbed areas are stabilized.

As part of the SWPPP preparation, the Risk Level would be determined for the Project. The Risk Level would define the extent of effluent monitoring and reporting during construction, and its determination would include an assessment of the sediment risk and the receiving water risk. The following is a list of permit requirements associated with the respective Risk Levels:

- Risk 1: Minimum – BMPs and visual monitoring.
- Risk 2: Minimum – BMPs, visual monitoring, testing for Numeric Action Levels (NAL) and runoff monitoring.
- Risk 3: Minimum – BMPs, visual monitoring, testing for Numeric Action Levels (NAL), testing for Numeric Effluent Limitations (NEL), runoff monitoring and receiving water monitoring.

The CGP requires the SWPPP to include a menu of BMPs to be selected and implemented based on the phase of construction and the weather conditions to effectively control erosion, sediment, and other construction related pollutants to meet the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology (BAT/BCT) standards. The following types of BMPs, as applicable, would be implemented during construction:

Erosion Control

- Physical stabilization through hydraulic mulch, soil binders, straw mulch, bonded fiber matrices, and/or erosion control blankets.
- Soil roughing of graded areas to slow runoff, enhance infiltration, and reduce erosion.
- Wind erosion (dust) control through the application of water or other dust palliatives as necessary to prevent and alleviate dust nuisances.

Sediment Control

- Perimeter protection through silt fences, fiber rolls, gravel gab germs, sand bag barriers, and straw ball barriers.
- Storm drain inlet protection.
- Sediment capture through sediment traps, storm drain inlet protection, and sediment basins.
- Velocity reduction through check dams, sediment basins, and/or outlet protection/velocity dissipation devices.
- Reduction in off-site sediment tracking through stabilized construction entrance/exist, construction road stabilization, and/or entrance/exit tire wash.

Waste and Materials Management

- Management of the following types of materials, products, and wastes; solid, sanitary, concrete, hazardous, and equipment-related wastes through proper storage of raw materials and appropriate waste disposal practices.

- Protection of soil stockpiles through covers, the application of water or soil binders, and/or perimeter control measures.

Non-stormwater Management

- Good housekeeping practices to reduce or limit pollutants at their source before they are exposed to stormwater, including such measures as: water conservation practices, procedures for propose vehicle and equipment cleaning and fueling, and cover and/or containment of stored materials.
- If construction dewatering or discharges from other specific construction activities such as water line testing and sprinkler system testing are required, comply with the requirements of the CGP, a General NPDES Permit for construction dewatering or an appropriate industrial sewer discharge permit.

Training and Education

- Training of individuals responsible for SWPPP preparation, implementation, and permit compliance, including contractors and subcontractors.
- Signage to address SWPPP related issues (such as site cleanup policies, BMP protection, washout locations, etc.)

Maintenance, Monitoring, and Inspections

- Performing routine site inspections and inspections before, during and after storm events
- Implementing maintenance and repairs of BMPs as indicated by routine and storm event inspections
- Preparation and implementation of a Sampling and Analysis Plan for non-visible pollutants.

These construction site management BMPS would be implemented for the proposed Project during the dry season and wet seas as necessary depending upon the phase of construction weather conditions. The BMPS would provide effective control of not only sediment discharge, but also of pollutants associated with sediments, such as and not limited to nutrients, heavy metals, and certain pesticides.

Prior to issuance of a preliminary or precise grading permits, the Project would provide the County with evidence that a Notice of Intent has been filed with the SWRCB to comply with the CGP. With implementation of the construction BMPs, construction of the Project would not result in a violation of water quality standards, result in substantial erosion or siltation on or off-site, provide substantial additional sources of polluted runoff, or substantially degrade water quality. Therefore, the Project would result in less than significant impacts associated with surface water quality impacts during construction.

4.3.2 Operational Impacts

In order to prevent long-term (operational) impacts to water quality, the Project would be designed to comply with the requirements of the Los Angeles Regional Water Quality Control Board Municipal Regional Stormwater NPDES Permit Order R4-2018-0087 NPDES Permit No. CAG914001 and the Los Angeles County design and construction

standards. A Stormwater Management Plan (aka LID Plan) to address permanent water quality controls and operational impacts would be prepared and implemented

The Project would comply with the County's 2013 LID Ordinance and 2014 Low Impact Development (LID) Standards Manual. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. LID is a sustainable practice that benefits water supply and contributes to water quality protection. Unlike traditional stormwater management, which collects and conveys stormwater runoff through storm drains, pipes, or other conveyances to a centralized stormwater facility, LID takes a different approach by using site design and stormwater management and attempts to maintain the site's pre-development runoff rates and volumes. The goal of the LID would be to mimic the site's predevelopment hydrology by using design techniques that filter, store, evaporate, and detain runoff close to the source of rainfall. LID includes specific techniques, tools, and materials to control the amount of impervious surface, increase infiltration, improve water quality by reducing runoff from developed sites, and reduce costly infrastructure.

Given the Site's landfill history and existing cap, the types of LID measures that may be considered for the Project are biofiltration facilities or rain gardens (lined with underdrains), flow through planters, lined grass swales and channels, vegetated lined filter strips and permeable pavements (lined with underdrains).

The Project LID Plan would include permanent control measures to reduce the long-term impacts of the Project on water quality and the tributary waterways. The LID strategies would be designed to reduce water quality impacts by preserving and recreating natural landscape features, storing, detaining, evapotranspiring and biotreating the surface water runoff on-site. Some examples of these LID measures that would be incorporated into the Project are as follows:

- Minimizing impervious surfaces that are directly connected to the storm drain system by routing runoff to landscaped areas;
- Using landscaping as a drainage feature;
- Using roofed trash enclosures;
- Connecting areas used for washing equipment to the sanitary sewer;
- Marking storm drain inlets with a "No Dumping" message;
- Street and parking lot sweeping;
- Regular inspection and cleaning of storm drain inlets;
- Engineering source control treatment measures (further described below).

Per the LID Manual, the Project must retain the stormwater quality design volume (SWQDv) on-site through infiltration, evapotranspiration, stormwater runoff harvest and reuse, or a combination thereof unless it is demonstrated that it is technically infeasible to do so. The Site and Project have some unique attributes that may make the implementation of LID technically infeasible.

- Based on the Site being a landfill, infiltration of stormwater poses a risk of pollutant mobilization. Hence, retention based stormwater quality control measures would be avoided.
- The proposed Project does not have a substantial need for stormwater re-use. Hence, stormwater runoff harvest and reuse would not be technically feasible.

Per the LID manual, alternative compliance methods which do not rely on infiltration or reuse to treat the stormwater runoff would be designed and implemented. The proposed BMPs could include a combination of the following engineering measures:

- On-site biofiltration (lined bioswales and biodetention basins).
- Vegetation-based stormwater quality control measures (self-treating landscape areas and lined planters).
- Proprietary stormwater quality control measures (aka manufactured treatment devices).

A LID Plan would be prepared to document the design of the LID BMP measures for the Project. The Plan would be submitted for approval by the County and would be the operable stormwater system approval for the Project. Based on the alternative compliance requirements, these LID BMP measures would be designed to satisfy the General Permit requirements. Implementation of the LID measures would improve surface water runoff quality compared to current conditions, since currently no pollutant reduction measures exist, and the Project would not result in a violation of water quality standards, result in substantial erosion or siltation on or off-site, provide substantial additional sources of polluted runoff, or substantially degrade water quality. Therefore, the project impacts with respect to surface water quality will be less than significant.

4.4 Groundwater

4.4.1 Construction Impacts

Groundwater at the Site is not pumped for beneficial uses. The nearest active drinking water supply wells are over 2 miles south-southeast of the BKK landfill. The Project would be serviced by the California Water Service and Los Angeles County Sanitation District, and no short-term or long-term dewatering activities are anticipated, and no production wells for a source of water during construction would be installed. The Project would not draw directly from any groundwater supplies. Therefore, Project construction would not substantially deplete groundwater supplies.

Short-term groundwater quality impacts could potentially occur during construction of the Project as a result of soil or shallow groundwater being exposed to construction materials, wastes or spilled materials. Compliance with existing, applicable federal, state and local requirements concerning the handling, storage and disposal of hazardous materials would effectively reduce the potential for the construction of the Project to release contaminants into groundwater

The status of abandoned well DWC-11 within OU-2 is unknown, however, it was reportedly covered with up to 15 ft fill material and is not visible. Attempts to locate the well during final design and/or construction via geophysical methods and possibly test pits will be made. If encountered, the well will be closed per the applicable California Department of Water Resources and DTSC requirements.

With compliance with the existing, applicable regulatory requirements, Project construction would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Therefore, Project construction impacts to groundwater would be less than significant.

4.4.2 Operational Impacts

Due to the landfill soil cover there is limited to no existing surface water infiltration into and through the landfill, and limited to no groundwater recharge currently occurring. While some surface water infiltration and storage has occurred in the vegetative cover and previous reports documented areas of surface ponding that may have promoted infiltration through cracks in the soil cover cap, the existing conditions significantly limit the potential for groundwater recharge regardless of the percentage of impervious surfaces on the Site. The areas beyond the refuse areas also contain existing impermeable surfaces such as buildings and paved parking lots.

The Project would enhance the functionality of the landfill soil cover cap by the placement of fill over the majority of the Site. Consistent with the DTSC Remedial Action Plan that requires reducing infiltration, the Project would further reduce potential infiltration due the increase in impervious cover, use of liners in the stormwater LID BMPs and under the athletic fields and an increased level of overall property and improvement maintenance.

On-site activities during operation of the Project are not anticipated to have an impact on groundwater quality. Other than routine handling of hazardous materials associated with office, janitorial, building maintenance and landscaping supplies, no handling of hazardous materials is anticipated. Any potential surface spills from the handling of hazardous materials most often involve small quantities that are cleaned up in a timely manner, thereby resulting in little threat to groundwater. With implementation of general good housekeeping procedures and compliance with the existing, applicable regulatory requirements Project operation would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

The Project will have less than significant impacts on groundwater due to the preservation of the existing low-permeability soil cover cap and the import of fill, which further limits surface water infiltration.

5.0 CONCLUSIONS

5.1 Summary of Recommendations

The Site and surrounding areas are located in a fully developed urbanized area with existing stormwater, utility and roadway infrastructure. The Project would be designed and operated in compliance with the relevant regulatory requirements. With compliance with the applicable regulatory requirements as provided herein impacts to surface water hydrology and water quality and groundwater would be less than significant.

6.0 REFERENCES

California Code of Regulations, "Title 14. California Code of Regulations; Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act", dated 27 July 2007.

California State Water Resources Board, "General Permit for Stormwater Discharges Associated with Construction Activities, Water Quality Order 2009-0009-DWQ", as amended by "Order No. 2010-0014-DWQ" and "2012-006-DWQ", dated 17 July 2012.

California Stormwater Quality Association, "Stormwater Best Management Practice Handbook", dated January 2003.

California Water Service Company, "Dominguez District 2015 Urban Water Management Plan", dated 2015.

County of Los Angeles Department of Public Works, "Hydrology Manual", dated January 2006.

County of Los Angeles Department of Public Works, "Low Impact Development Standards Manual", dated February 2014.

Dominguez Channel Watershed Management Area Group, "Coordinated Integrated Monitoring Program for the Dominguez Channel Watershed Management Area Group: Draft", dated June 2014.

Federal Emergency Management Agency, "Flood Insurance Rate Map (FIRM)", Panel 1935 of 2350, Map Number 06037C1935F, dated 26 September 2008.

Burns McDonnell, "Remedial Action Plan for Soil and Landfill Gas Media, Former BKK Landfill, Carson Dump, Operable Unit 2, 340 East 192nd St., 19202 South Main St., 19200 South Main St., City of Carson, California 90248" dated June 2014.

State of California, California Environmental Protection Agency, Department of Toxic Substances Control, "Docket No. HAS-CO 05/05-114 Settlement Agreement and Consent Order" dated May 2006.

State of California, California Environmental Protection Agency, Department of Toxic Substances Control, "Review of Draft Revised Remedial Investigation and Feasibility Study for Soil and Gas Media" dated June 2014.

California DOT, City of Long Beach, City of Los Angeles, City of Torrance, Los Angeles County and Los Angeles County Flood Control District Contaminated Sediment Management Plan: Dominguez Channel Estuary dated March 2014

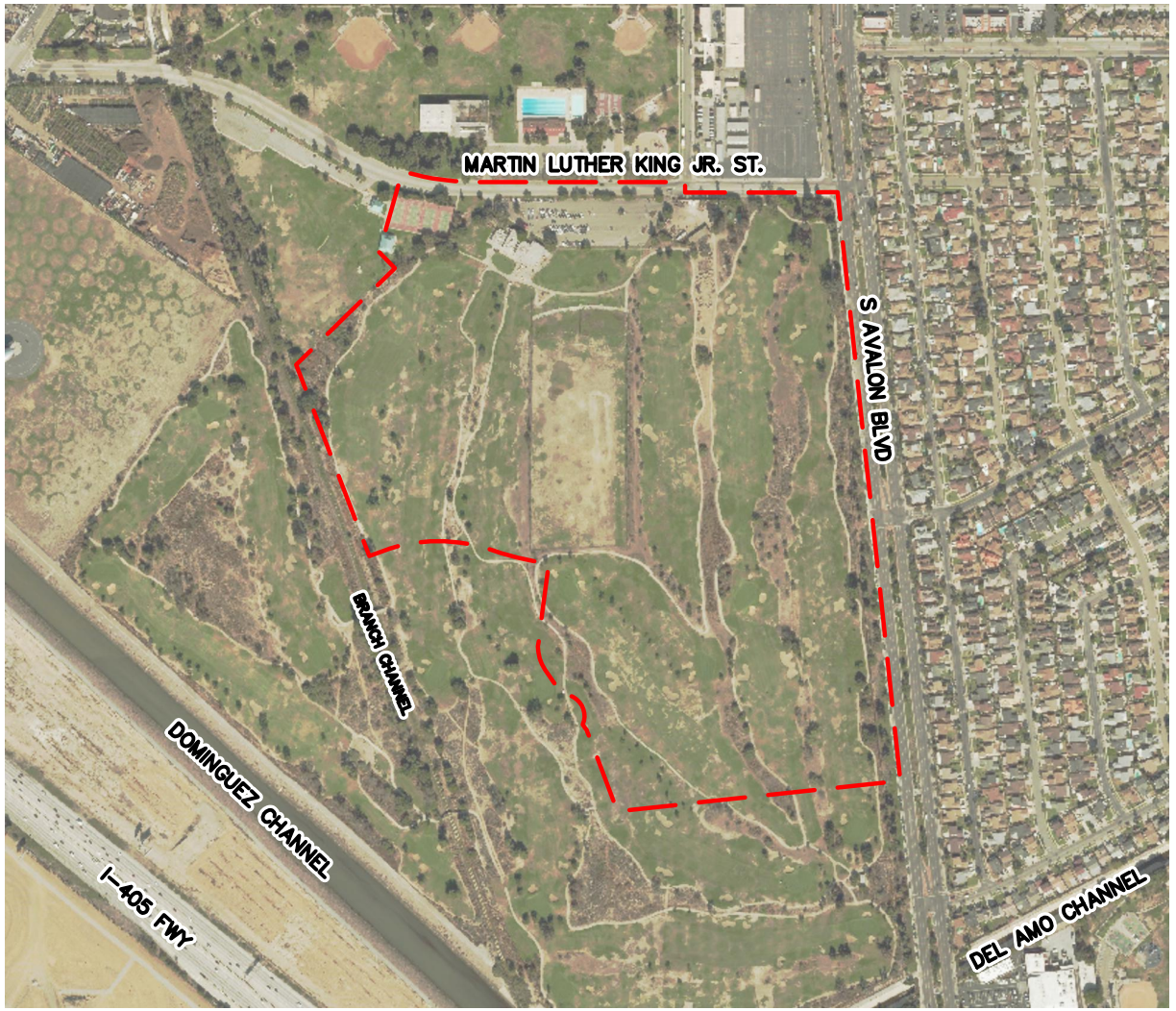
FIGURES

LEGEND:

APPROXIMATE SITE LIMITS

NOTES:

1. BACKGROUND AERIAL IMAGE REFERENCED FROM BING MAPS ON 30 JULY 2018.
2. APPROXIMATE SITE LIMITS BASED ON THE PLAN TITLES "CAROL KIMMELMAN SPORTS AND ACADEMIC CENTER, ILLUSTRATIVE OVERALL SITE PLAN" BY MEIS ARCHITECTS, INC.



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SCALE: 1"=700'

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Project	CAROL KIMMELMAN ATHLETIC & ACADEMIC CAMPUS UNINCORPORATED AREA OF LOS ANGELES COUNTY CA
Drawing Title	SITE VICINITY MAP
Project No.	700060401
Date	12 APRIL 2019
Drawn By	JL
Checked By	DJ
Drawing No.	1

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Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Hydrology Figures\700060401-FIG-01-Site Location Plan.dwg Date: 4/16/2019 Time: 15:14 User: dhodson Style Table: Langan.stb Layout: 8.5 X 11

NOTE:

1. CONCEPTUAL SITE PLAN BASED ON THE PLAN TITLES "CAROL KIMMELMAN SPORTS AND ACADEMIC CENTER, ILLUSTRATIVE OVERALL SITE PLAN" BY MEIS ARCHITECTS, INC.



LEGEND

TENNIS CENTER

1. WELCOME CENTER
2. LEARNING CENTER
3. ENTRY PLAZA
4. BASKETBALL COURTS
5. COMPETITION VENUE (12 HARD COURTS)
6. PLAYER DEVELOPMENT / COLLEGIATE CENTER
7. TOURNAMENT/ LEAGUE ADMINISTRATION BUILDING
8. 100M SPRINT TRACK
9. 4 CLAY COURTS
10. MONUMENT ENTRY/ SIGN
11. CENTRAL PLAZA
12. 8 36 FT COURTS
13. 4 60 FT COURTS (+4 FUTURE COURTS)
14. TRAINING TURF
15. TENNIS CENTER COURTS (24 HARD COURTS)
16. FUTURE COVERED COURTS (6 COURTS)
17. MAINTENANCE BUILDING
18. OUTDOOR EXERCISE COURSE
19. VISITOR PARKING
20. BUS PARKING
21. EMPLOYEE PARKING
22. OVERFLOW PARKING

SOCCER CENTER

23. 2 NATURAL GRASS MULTIPURPOSE FIELDS
24. 6 FULL SIZE NATURAL GRASS SOCCER FIELDS
25. 2 FULL SIZE ARTIFICIAL TURF SOCCER FIELDS
26. SUPPORT BUIDLING
27. SOCCER PARKING
28. OVERFLOW PARKING

N

NOT TO SCALE

MEIS

ILLUSTRATIVE OVERALL SITE PLAN

07/20/2018

A 100

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Project	CAROL KIMMELMAN ATHLETIC & ACADEMIC CAMPUS UNINCORPORATED AREA OF LOS ANGELES COUNTY CA
Drawing Title	CONCEPTUAL SITE PLAN
Project No.	700060401
Date	12 APRIL 2019
Drawn By	CJH, WH
Checked By	DJ
Figure No.	2

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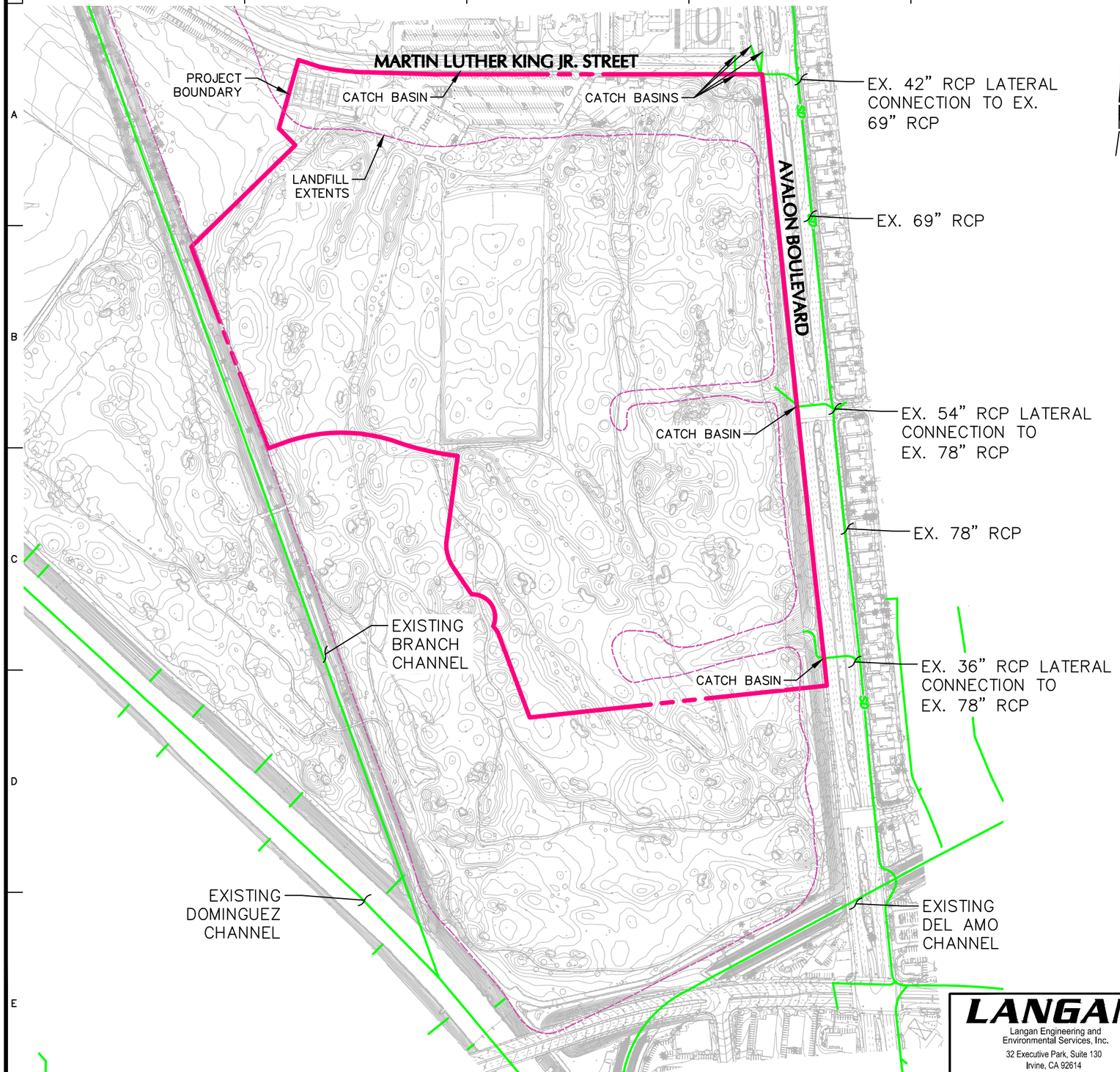
Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Hydrology Figures\700060401-FIG-02-Conceptual Site Plan.dwg Date: 4/16/2019 Time: 15:17 User: dhodson Style Table: Langan.stb Layout: 11 X 17



LEGEND:

- PROJECT BOUNDARY LINE
- LANDFILL EXTENTS
- SD — EXISTING STORM DRAIN (APPROXIMATE LOCATION)

NOTES:

1. EXISTING TOPOGRAPHIC INFORMATION AS SHOWN ON THIS DRAWING IS BASED ON THE SURVEY BY DIGITAL MAPPING, INC., DATED 03/06/2018.
2. LANDFILL EXTENTS ARE BASED ON CONCEPT BY MEIS ARCHITECTS.
3. STORMWATER DRAINS ARE BASED ON GIS INFORMATION PROVIDED BY LOS ANGELES COUNTY.

400 200 0 400

SCALE: 1"=400'

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Project	CAROL KIMMELMAN ATHLETIC & ACADEMIC CAMPUS UNINCORPORATED AREA OF LOS ANGELES COUNTY CA
Drawing Title	EXISTING DRAINAGE FEATURES
Project No.	700060401
Date	12 APRIL 2019
Drawn By	CJH, WH
Checked By	DJ
Figure No.	3

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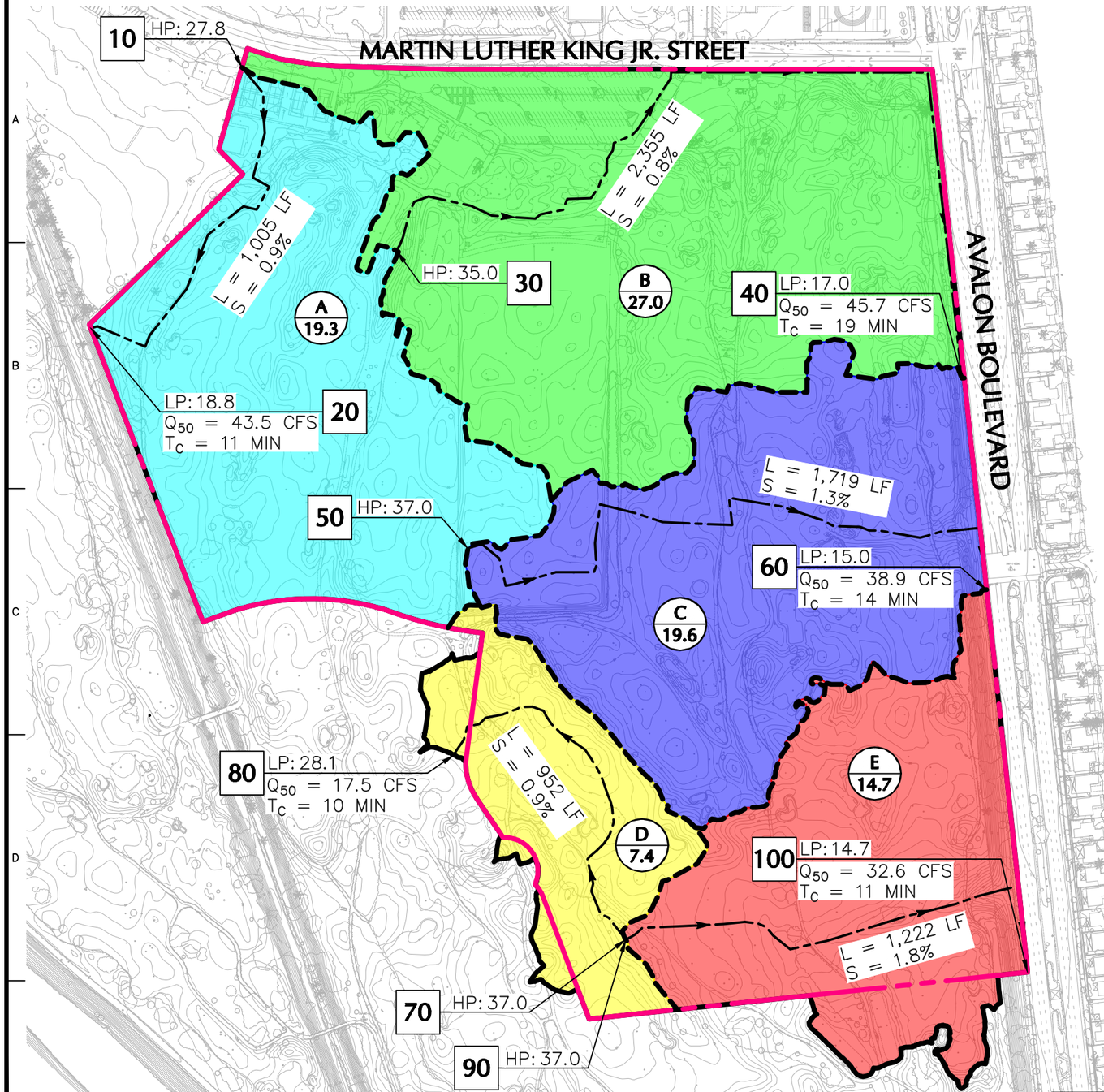
Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Hydrology Figures\700060401-FIG-03-ExDrainage features.dwg Date: 4/16/2019 Time: 15:21 User: dhodson Style Table: Langan.stb Layout: FIG-05



AREA AND RUNOFF SUMMARY:

Location	*Subarea Area (ac)*	*Subarea Q_{50} (cfs)*
A	19.3	43.5
B	27.0	45.7
C	19.6	38.9
D	7.4	17.5
E	14.7	32.6
Total:	87.9	178.2

LEGEND:

- PROJECT BOUNDARY LINE
- PROJECT WATERSHED BOUNDARY
- SUBAREA BOUNDARY
- FLOW PATH
- A / X — WATERSHED LABEL / AREA (AC)
- T_C — TIME OF CONCENTRATION
- Q_{50} — 50-YEAR RUNOFF FLOW
- LP: 15.4 — LOW POINT ELEVATION
- HP: 38.2 — HIGH POINT ELEVATION
- 80 — NODE NUMBER

NOTE:

1. EXISTING TOPOGRAPHIC INFORMATION AS SHOWN ON THIS DRAWING IS BASED ON THE SURVEY BY DIGITAL MAPPING, INC., DATED 03/06/2018.

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Project: CAROL KIMMELMAN ATHLETIC & ACADEMIC CAMPUS
UNINCORPORATED AREA OF LOS ANGELES COUNTY CA

Drawing Title: EXISTING DRAINAGE MAP

Project No. 700060401
Date 12 APRIL 2019
Drawn By CJH, WH
Checked By DJ

Figure No. 4

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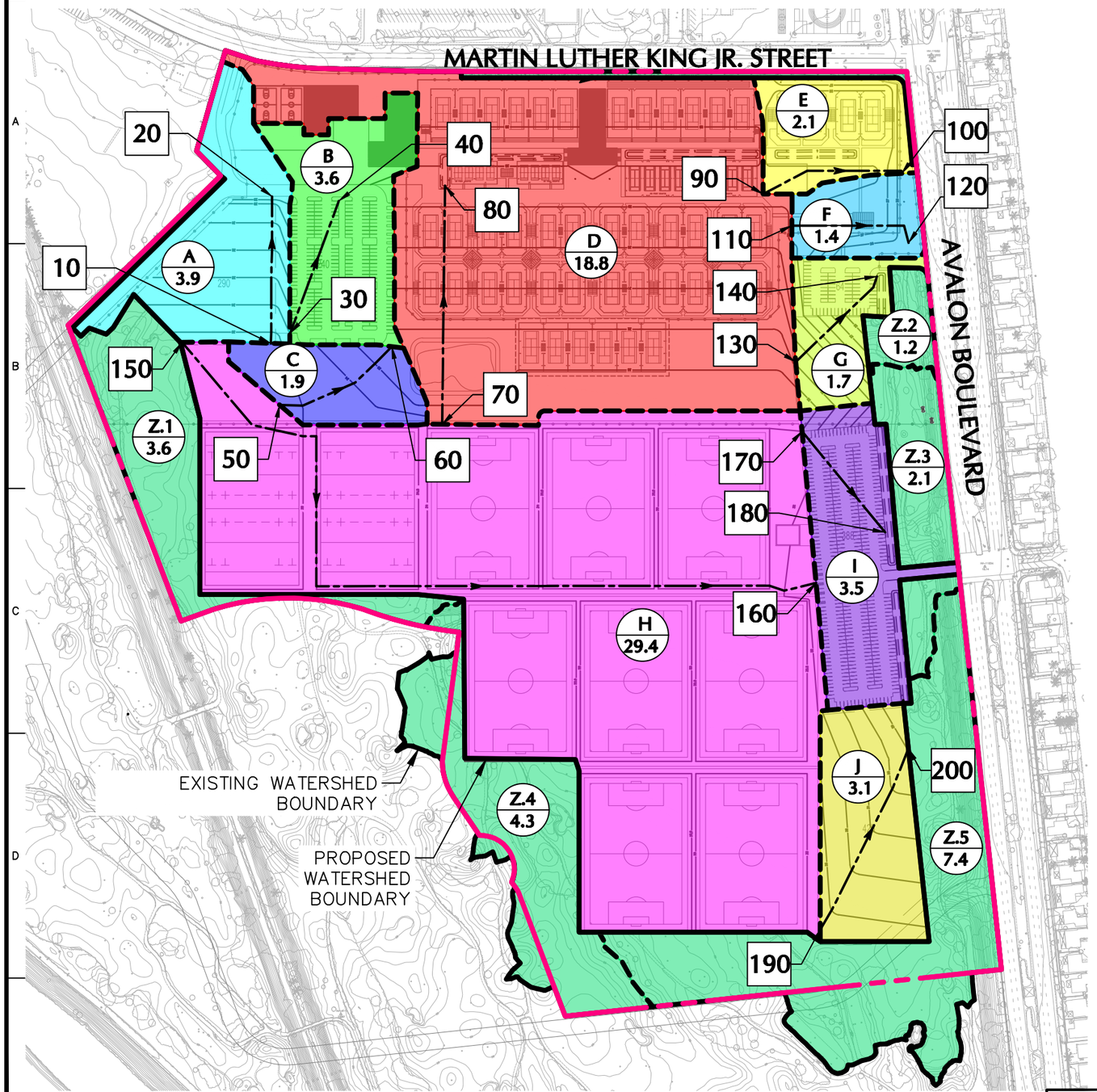
Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Hydrology Figures\700060401-FIG-04-ExDrainage.dwg Date: 4/16/2019 Time: 15:26 User: dhodson Style Table: Langan.stb Layout: 11x17



AREA AND RUNOFF SUMMARY:

Subarea	*Subarea Area (ac)*	*Subarea Q_{50} (cfs)*	*HP Node Number*	*High Pt. Elev. (ft)*	*LP Node Number*	*Low Pt. Elev. (ft)*	*Flow Plath Length (ft)*	*Flow Path Slope*	*T_c (min)*
A	3.9	12.9	*10*	35.5	*20*	27.6	360	2.2%	5
B	3.6	11.9	*30*	33.5	*40*	26.5	345	2.0%	5
C	1.8	6.0	*50*	35.2	*60*	32.5	323	0.8%	5
D	18.8	49.8	*70*	33.8	*80*	28.5	585	0.9%	8
E	2.1	6.9	*90*	28.5	*100*	24.5	360	1.1%	5
F	1.4	4.6	*110*	28.9	*120*	24.0	318	1.5%	5
G	1.7	5.6	*130*	33.0	*140*	21.4	291	4.0%	5
H	29.4	48.3	*150*	35.7	*160*	30.2	2,023	0.3%	21
I	3.5	11.6	*170*	33.0	*180*	24.6	320	2.6%	5
J	3.1	8.1	*190*	33.5	*200*	29.0	613	0.7%	8
Z.1	3.6	11.9							
Z.2	1.2	2.0							
Z.3	2.1	6.9							
Z.4	4.3	13.1							
Z.5	7.4	15.6							
Total:	87.9	215.2							

LEGEND:

- PROJECT BOUNDARY LINE
- PROJECT WATERSHED BOUNDARY
- SUBAREA BOUNDARY
- FLOW PATH
- A / X — WATERSHED LABEL / AREA (AC)
- T_C — TIME OF CONCENTRATION
- Q_{50} — 50-YEAR RUNOFF FLOW
- LP: 15.4 — LOW POINT ELEVATION
- HP: 38.2 — HIGH POINT ELEVATION
- 80 — NODE NUMBER

NOTE:

1. EXISTING TOPOGRAPHIC INFORMATION AS SHOWN ON THIS DRAWING IS BASED ON THE SURVEY BY DIGITAL MAPPING, INC., DATED 03/06/2018.

LANGAN
Langan Engineering and Environmental Services, Inc.
32 Executive Park, Suite 130
Irvine, CA 92614
T: 949.255.8640 F: 949.255.8641 www.langan.com

Project: CAROL KIMMELMAN ATHLETIC & ACADEMIC CAMPUS
UNINCORPORATED AREA OF LOS ANGELES COUNTY CA

Drawing Title: PROPOSED DRAINAGE MAP

Project No. 700060401
Date 12 APRIL 2019
Drawn By CJH, WH
Checked By DJ

Figure No. 5

© 2018 Langan

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Hydrology Figures\700060401-FIG-05-PrDrainage.dwg Date: 4/16/2019 Time: 15:37 User: dhodson Style Table: Langan.stb Layout: 11x17

APPENDIX A
Federal Emergency Management Agency
Flood Insurance Rate Map

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC–3, #9202
1315 East–West Highway
Silver Spring, MD 20910–3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713–3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994 or later and from National Geospatial Intelligence Agency imagery produced at a scale of 1:4,000 from photography dated 2003 or later.

This map reflects more detailed and up–to–date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in *the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

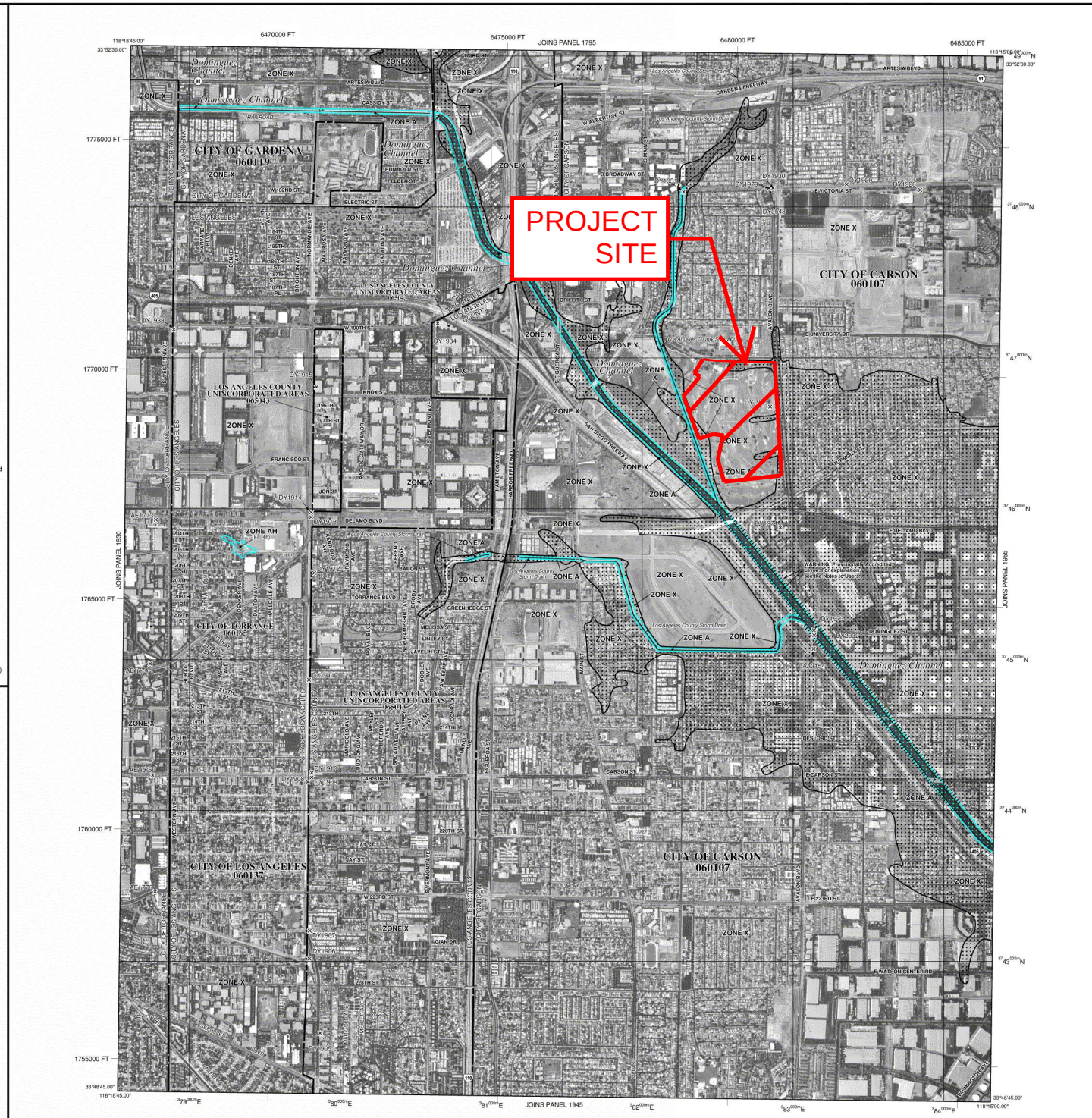
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de–annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1–800–358–9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a *Flood Insurance Study report*, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1–800–358–9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1–877–FEMA MAP** (1–877–336–2627) or visit the FEMA website at http://www.fema.gov/.

WARNING: This levee, dike, or other structure has been provisionally accredited and mapped as providing protection from the 1-percent-annual-chance flood. To maintain accreditation, the levee owner or community is required to submit documentation necessary to comply with 44 CFR Section 65.10 by October 16, 2009. Because of the risk of overtopping or failure of the structure, communities should take proper precautions to protect lives and minimize damages in these areas, such as issuing an evacuation plan and encouraging property owners to purchase flood insurance.


PROJECT SITE
6470000 FT
6475000 FT
6480000 FT
6485000 FT
1775000 FT
1770000 FT
1765000 FT
1760000 FT
1755000 FT
JOINS PANEL 1795
JOINS PANEL 1930
JOINS PANEL 1965
JOINS PANEL 1945
CITY OF GARDENA 060119
CITY OF CARSON 060107
CITY OF TORRANCE 060165
CITY OF LOS ANGELES 060137
LOS ANGELES COUNTY UNINCORPORATED AREAS 065043
Dominguez Channel
Los Angeles County Storm Drain
ZONE X
ZONE A
ZONE AH
ZONE AE
ARTESIA BLVD
CASSIDY ST
RAILROAD
W 162ND ST
ELECTRIC ST
W 190TH ST
W 213TH ST
W 223RD ST
E 223RD ST
VICTORIA ST
E VICTORIA ST
BROADWAY ST
W ALONDRA BLVD
GARDENA FREEWAY
GREENLEAF BLVD
E UNIVERSITY DR
CARSON ST
E CARSON ST
DOMINGUEZ ST
DELAMO BLVD
TORRANCE BLVD
GREENHEDGE ST
JAVELIN ST
FIAT ST
JAY ST
GLIAN DR
SAN DIEGO FREEWAY
HARBOR FREEWAY
ARTESIA FREEWAY
EWATSON CENTER RD
DY1907
DY1908
DY1914
DY1915
DY1916
DY1917
DY1918
DY1919
DY1920
DY1921
DY1922
DY1923
DY1924
DY1925
DY1926
DY1927
DY1928
DY1929
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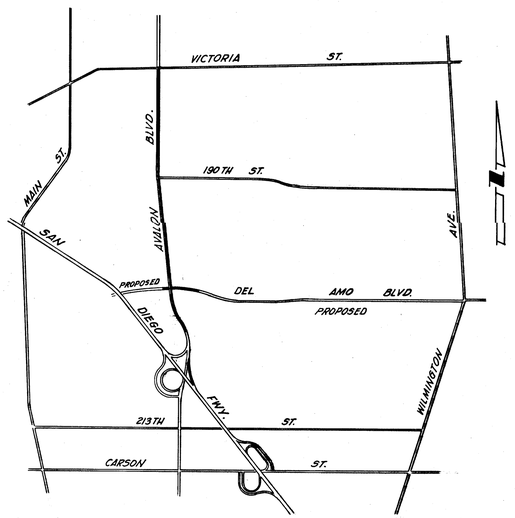
DY1931
DY1932
DY1933
DY1934
DY1935
DY1936
DY1937
DY1938
DY1939
DY1940
DY1941
DY1942
DY1943
DY1944
DY1945
DY1946
DY1947
DY1948
DY1949
DY1950
DY1951
DY1952
DY1953

APPENDIX B
Existing Storm Drain Records

SHEET INDEX TO DRAWINGS

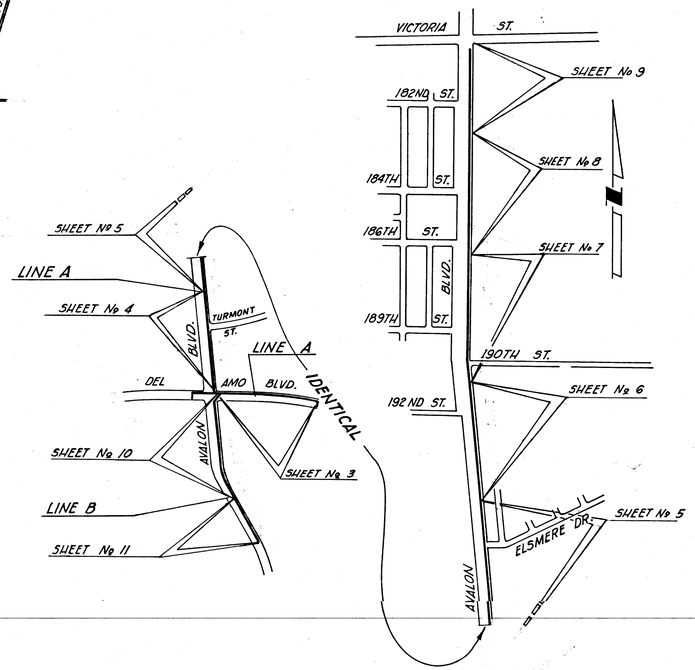
SHEET NO. 1	SHEET INDEX, GENERAL NOTES, LOCATION MAP.
SHEET NO. 2	STANDARD DRAWING LIST, TYPICAL CONNECTOR PIPE PROFILE & RESURFACING REQUIREMENTS.
SHEET NO. 3	PLAN & PROFILE, STA. 1+09.87 TO 10+45.50 ,LINE A
SHEET NO. 4	PLAN & PROFILE, STA. 10+45.50 TO 23+00.00 ,LINE A
SHEET NO. 5	PLAN & PROFILE, STA. 23+00.00 TO 37+00.00 ,LINE A
SHEET NO. 6	PLAN & PROFILE, STA. 37+00.00 TO 47+00.00 ,LINE A
SHEET NO. 7	PLAN & PROFILE, STA. 47+00.00 TO 61+00.00 ,LINE A
SHEET NO. 8	PLAN & PROFILE STA. 61+00.00 TO 72+00.00 LINE A
SHEET NO. 9	PLAN & PROFILE STA. 72+00.00 TO 80+56.17 ,LINE A
SHEET NO. 10	LINE B - PLAN & PROFILE - STA. 0+00.00 TO 11+00.00
SHEET NO. 11	LINE B - PLAN & PROFILE - STA. 11+00.00 TO 16+90.37
SHEET NO. 12	PROFILES, LATERALS "A", "B", "C" & "G", STRUCTURAL NOTES.
SHEET NO. 13	LOG OF SOIL BORINGS
SHEET NO. 14	STRUCTURAL DETAILS
SHEET NO. 15	DETAILS OF EXISTING R.C. CHANNEL



VICINITY MAP

0 1000 2000 4000

GRAPHIC SCALE
1"= 2000'



LOCATION MAP

0 600 1200

GRAPHIC SCALE
1"= 600'

LEGEND

TEST BORING	T.B.
LOCAL DEPRESSION	L.D.
CURB & GUTTER	C.&G.
TOP OF CURB	T.C.
FLOW LINE	F.L.
MANHOLE	M.H.
JUNCTION STRUCTURE	J.S.
TRANSITION STRUCTURE	T.S.

GENERAL NOTES

1. Numbers in circles indicate items under which payment will be made.
2. Elevations shown are in feet above the U.S.G.S. mean sea level datum.
3. Stations shown on drawings are along center line of conduit or on a line normal to center line of conduit.
4. Stations and invert elevations of pipe inlets shown on the profiles are at the inside face of the conduit, unless otherwise shown.
5. All field book references are to Los Angeles Co. Road Dept. field books, unless otherwise noted.
6. All pipe in open trench shall be bedded according to Standard Drawing 2-D177, Case III, except bell and spigot pipe which shall be Case II bedding, unless otherwise shown or modified in the specifications.
7. Pipe connections to storm drain shall conform to Standard Drawings 2-D191 and 2-D193 unless otherwise noted.
8. Where required by Standard Drawing 2-D 213.1, concrete backfill shall be used around connector pipes 36 inches or less in diameter. Concrete backfill for mainline pipe shall be used only when directed by the Engineer.
9. Ties for catch basins as shown on the drawings are from curb return to centerline of catch basin, unless otherwise shown.
10. See Sheet 14 for details of reinforced concrete box conduits - See Sheet 12 for structural notes.
11. Local Depressions shall be L.D. N° 4 per 2-D415, except that the dimension "G" on the PLAN shall be "6" for Catch Basins No.7. Where no gutter exists, G=2'. where there is no existing pavement to join, the outer edge of the local depressions are to be constructed 0.5' below top of curb.
12. The openings and top slabs of all side inlet catch basins shall be modified to meet the requirements shown on Standard Drawing No. 2-D232, including Catch Basins N° 7.
13. Locations of catch basin connector pipe junctions with catch basins as shown on the drawings are schematic. It is intended that such junctions be located at the downstream ends of the catch basins, unless otherwise shown. In all cases the exact locations will be determined in the field by the Engineer to meet field conditions.
14. Monolithic catch basin connections shall be constructed, where applicable, per Standard Drawing 2-D 224.
15. The depth of the upstream end of catch basins 10 feet or more in length shall be curb face plus 12 inches, unless otherwise shown.
16. "V", is the depth of inlet of catch basins in series measured from top of curb to invert of connector pipe.
17. All existing utilities shown on the drawings are the property of the County of Los Angeles, unless otherwise noted.
18. Existing utilities shall be maintained in place by the Contractor, unless otherwise noted.
19. The Contractor shall notify Mr. Robert Powell (NEvada 6-3079) of the Los Angeles County Sanitation Districts at least forty-eight hours prior to commencing construction work on Los Angeles County Sanitation Districts' sanitary sewers or appurtenances.
20. Utilities designated by the symbol "*" will be abandoned in place and the owner will reinstall a new section of the affected utility at a location in close proximity to, but which does not physically interfere with, the proposed storm drain conduit and appurtenant structures.
21. Utilities designated by the symbol "≠" will be removed by the owner and the owner will reinstall a new section of the affected utility of a location in close proximity to, but which does not physically interfere with, the proposed storm drain conduit and appurtenant structures.
22. Deleted
23. Locations shown on the plans for existing sanitary sewer house connections are approximate only.
24. Sanitary sewer house connection reconstruction and reconnection shall be in accordance with Standard Drawing 2-D 250.
25. Sanitary sewers and house connections crossing over the storm drain trench shall be supported in accordance with Standard Drawing 2-D 173.1 to .3 and encased per General Note 1 on Standard Drawing 2-D 173.1.
26. When indicated on the drawings, sanitary sewers and house connections shall be encased or blanketed in accordance with Standard Drawing 2-D 251.
27. All openings resulting from the cutting or partial removal of existing culverts, pipes or similar structures shall be sealed with 8 inches of brick and mortar or 6 inches of concrete, unless otherwise shown.
28. All resurfacing, curbs and gutters, sidewalks, driveways and other existing improvements to be reconstructed shall be constructed at the same elevation and location as the existing improvements, unless otherwise noted.
29. Refer to Sheet 2 for typical catch basin connector pipe profile.
30. Soil test borings for this project were made in April, 1966.
31. All Catch Basins N° 7 are required to have protection bar(s). The protection bar installation shall be in accordance with Standard Drawing N° 2-D232, except that the bottom(s) of required bolt support(s) shall be cut off and welded to the angle of the grating frame as directed by the Engineer in the field. Repair of galvanized surfaces shall be in accordance with par. 9-03 of the Specifications.

"AS BUILT" DRAWING

DRAWN BY	REVISIONS		
V.T.N.	MARK	DATE	DESCRIPTION
CHECKED BY V.T.N.			
DESIGNED BY V.T.N.			
SUBMITTED BY C.W.H.			

APPROVED BY
E. T. Mahan
ACTING ROAD COMMISSIONER
6/28/66 DATE
LOS ANGELES COUNTY ROAD DEPARTMENT

PLANS PREPARED BY
VOORHEIS-TRINDLE AND NELSON, INC.
Jack Mahoney
JACK MAHONEY R.E. 14,325

PD017033

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT

DEL AMO CHANNEL — AVALON BLVD. STORM DRAIN

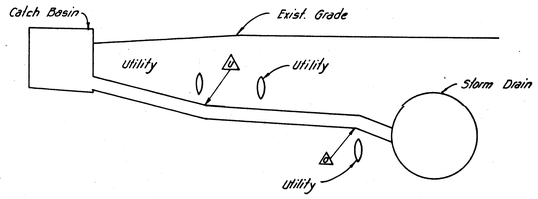
SHEET INDEX, GENERAL NOTES, LOCATION MAP, VICINITY MAP

RECOMMENDED BY
C. F. Eichelberg
DIVISION ENGINEER - DESIGN

APPROVAL RECOMMENDED BY
Milton W. Ransom
ASS'T CHIEF DEPUTY ENGINEER

APPROVED BY
Walter J. Ward
CHIEF ENGINEER

SCALE	DATE	DWG. NO. 314-D2.1
AS SHOWN	JULY, 1966	SHEET 1 OF 15



NOTES :

1. The change in grade of the connector pipe may occur either over or under an existing utility. The particular utility at which the change occurs is noted on the project drawings. At locations where utility crossings are marked (4), the connector pipe grade will break over the utility. At locations where utility crossings are marked (4), the connector pipe grade will break under the utility.
2. On those connector pipes where a change in grade is not indicated, it is assumed that that the connector pipe can be laid on a straight grade from the catch basin to the storm drain without interfering with the utilities.
3. The Contractor shall make exploratory excavations to determine the exact location and depth of utilities which are marked (4) or (4). After the exact location of a utility has been determined, the grade and alignment of the connector pipe will be staked so as to clear the utility.
4. Where the connector pipe has a change of grade exceeding 0.10' per foot or differs in diameter from the existing pipe, use conc. collar per Std. 2-D393.

TYPICAL CONNECTOR PIPE PROFILE

NO SCALE

STANDARD DRAWINGS

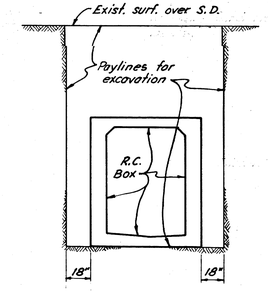
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

2-D96 STD. DROP STEP
2-D107 CONCRETE RINGS REDUCER & PIPE FOR MANHOLE SHAFT
2-D112 JUNCTION STRUCTURE NO. 2
2-D113 MANHOLE NO. 4
2-D156 MANHOLE FRAME & COVER FOR CATCH BASINS.
2-D157 CATCH BASIN REINFORCEMENT FOR ROUND MANHOLES.
2-D158 DETAIL OF BOLT SUPPORT FOR CATCH BASINS
2-D160 CATCH BASIN NO. 1
2-D161 ANGLE & ANCHOR FOR CATCH BASINS
2-D162 CATCH BASIN NO.2
2-D163 CATCH BASIN NO.3
2-D164 CATCH BASIN NO. 5
2-D171 STANDARD A305 REINFORCING BARS
2-D172 CATCH BASIN REINFORCEMENT
2-D173.1 & 3 PIPE SUPPORTS ACROSS TRENCHES
2-D175 REMOVABLE PROTECTION BAR FOR CATCH BASINS
2-D177 PIPE BEDDING IN TRENCHES
2-D181 STD. NON ROCKING MANHOLE FRAME & COVER
2-D184 MANHOLE NO. 2
2-D188 TRANSITION STRUCTURE NO. 3
2-D193 JUNCTION STRUCTURE NO. 4
2-D213 & 2 'D LOAD TABLES
2-D191 JUNCTION STRUCTURE NO. 3
2-D224 CONNECTIONS TO CATCH BASINS
2-D227 FRAME & GRATING FOR CATCH BASINS
2-D232 CATCH BASIN OPENINGS
2-D415 LOCAL DEPRESSION NO. 4
2-D 251 PROTECTION FOR MAIN LINE & HOUSE CONNECTION SEWERS
2-D264 ADJUSTABLE PROTECTION BAR STIRRUP
2-D393 CONCRETE COLLAR

2D 399 DESIGN OF SHORING FOR EXCAVATIONS
2-D400 CALC. SHEET FOR SHORING OF EXCAVATIONS
2-D413 UNIFIED SOIL CLASSIFICATION SYSTEM
2-D250 REMODELING OF SANITARY SEWER HOUSE CONNECTIONS
2-D170 CATCH BASIN NO. 7
2-D102 MANHOLE NO. 1

LOS ANGELES COUNTY ROAD DEPARTMENT

430.01 CURB & GUTTER
M57-39R PARTIAL CONCRETE REPLACEMENT FOR CROSS GUTTERS & SPANDRELS.
M57-45R SPECIFICATIONS FOR REPAIRS OF CUTS IN CONCRETE PAVEMENT.



TYPICAL PAYLINES FOR EXCAVATION (4)

NO SCALE

RESURFACING REQUIREMENTS

EXISTING SURFACE *	REPLACEMENT (1)
2" P.M.S. over 3" base	4" A.C. over 8" base
3" P.M.S. over 5" base	4" A.C. over 5" base
4" P.M.S. over 8" base	5" A.C. over 8" base
4" P.M.S. over 7" base	5" A.C. over 7" base
12" Concrete	12" Concrete
8" conc. over 16" base	8" conc. over 16" base
8" conc. over 5" base	8" conc. over 5" base
8" conc. over 12" base	8" conc. over 12" base
4" P.M.S. over 8" conc. over 20" base	8" conc. over 12" base
4" P.M.S. over 8" conc. over 24" base	8" conc. over 12" base
4" P.M.S.	5" A.C.

* See general plans for location of various types of existing surfacing.

"AS BUILT" DRAWING

DRAWN BY	REVISIONS		
V. T. N.	MARK	DATE	DESCRIPTION
CHECKED BY V. T. N.			
DESIGNED BY V. T. M.			
SUBMITTED BY C. W. H.			

"PD017034"

PLANS PREPARED BY
VOORHEIS-TRINDLE AND NELSON, INC.
Jack Mahoney
JACK MAHONEY R.E.14,325

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT

DEL AMO CHANNEL —
AVALON BLVD. STORM DRAIN

LIST OF STANDARD DRAWINGS,
TYPICAL CONNECTOR PIPE PROFILE

RECOMMENDED BY C. F. Ahlberg DIVISION ENGINEER (DESIGN)
APPROVED BY Warren J. Wood CHIEF ENGINEER

SCALE	DATE	DWG. NO. 314-D2.2
AS SHOWN	JULY, 1966	SHEET 2 OF 15

PROFILE

HORIZ. SCALE: 1" = 40
VERT. SCALE: 1" = 4'

Backfill to finished surface
Exist. grd. over storm drain
Roadway
℄ CHANNEL P.D. 669
EQUATION: STA. 15+57.65 E.C. BACK = STA. 15+46.52 AHEAD
TURMONT ST.
13.80 T.S.
14+33.53 M.H.
18+25.00 M.H.
11.82 T.S.
E'ly. edge exist. conc. pvmt.
17+72 16" INLET
1.96 Inv.
2.15 Inv.
10+96.34 24" INLET (W)
2.11 Inv.
Exist. 21" sewer
Exist. 15" sewer
S = .00055
S = .0005
S = .01810
S = .0018
Exist. 21" sewer
Exist. 18" sewer
Exist. 15" sewer
11.82 Top bell
Exist. 8" V.C.P. sewer
17+15 G.B. Inv. 2.06
Blanket per Std. № 2-D251 Case IV half section D-D
(52)
CONST. 384.03 L.F. 78" R.C.P. 800 D
(10)
CONST. 71.12 L.F. 7'-10" x 4'-3" R.C.B. SEE SHEET 14
(40)
CONST. 753.78 L.F. 78" R.C.P. 1000 D
(9)
10+45.50 BEG. 78" R.C.P.
END 78" R.C.P. 14+29.53
14+37.53 B.C.
BEG. R.C.B.
END R.C.B. 15+04.67 E.C.
15+16.65 BEG. 78" R.C.P.
22+60.00 36" INLET (W)
2.96 Inv.
2.94 Inv.
3.01
22+60.00 M.H.
11.83 T.S.
MATCH LINE
23+00
22+59.30
END 78" R.C.P.
22+68.00
BEG. 78" R.C.P.
CONST. 32.00 L.F. 78" R.C.P. 1000 D

75'
65'
10'
R/W LINE
FUTURE IMPROVEMENTS
Oil lines
Gas line (47.5' E/O ℄)
78" R.C.P. STORM DRAIN (65' E/O ℄)
CROSS SECTION - STA. 19+00
SCALES: HORIZ: 1" = 20'
VERT: 1" = 4'
15" V.C.P. Sewer (52' E/O ℄)
21" V.C.P. Sewer (57' E/O ℄)

10
0
10
0
23+00
MATCH LINE

10 11 12 13 14 15 16 17 18 19 20 21 22 23
M.H. № 4

C.B. No 1 - ~~90.76~~ L.F. 18" R.C.P. 1500 D · V = 4.25 L.D. No. 4
(29)
91
9.50 T.C.
N 11° 44' 45" W
45.75'
3.88 T.C.
45.75'
C.B. No 1, ~~218~~ 222 L.F. 24" RCP - 1250 D V, = 5.13 V = 5.63 L.D. No. 4
(38)
(27)
(46)
P.D. 669
North boundary Tract 29429
Hill
T.S. № 1
(34)
VICTORIA
℄ STM. DRN. CURVE DATA: Δ = 81° 30' 00" R = 50' T = 43.08' L = 71.12'
524.36'
C.B. № 3-W-10, V=3.88 MODIFY PER DETAIL-SHEET 12 T.C. ELEV. = 11.75 L.D. № 4
(40)
J.S. № 2 A = 45° B = 21" C = 4.92' D = 36" EL.3" = 6.30
22+90.15
F.L. of rear opening = 10.5
FUT. CURB
SEE SHT. 5
(By others) Proposed 8" V.C.P. sewer
Future curb ℄ gutter
Exist. 3" A.C. cap over 12" conc.
SOUTH BOUND ROADWAY
Exist. 4" P.M.S. over 8" conc over 20" base
Exist. 8" conc. over 16" base
LATERAL "C", 36" R.C.P. SEE PROFILE SHT. 12
℄ 36" R.C.P. CURVE DATA Δ = 45° 00' 00" R = 45' T = 18.64 L = 35.34
Exist. 10" Oil line (Richfield Oil Co.)
AMO BLVD.
N 8° 15' 59" W
65'
150'
℄ CURVE DATA - ℄ 24" R.C.P. Δ = 27°00.00" R = 22.50' T = 5.13' L = 10.60'
Exist. 12" conc. pvmt
Future curb Exist. 4" plaste water line
Exist. dbl. R.C.B.
Exist. 8" Oil line (Richfield Oil Co.)
DEL
BLANKET EXIST. SEWERS - 2-D251 CASE IV ½ SEC. D-D
69'
47.5'
Exist. 12" Gas line (Richfield Oil Co.)
Exist. power tower
Exist. 15" V.C.P. Sewer
Exist. 21" V.C.P. Sewer
Q = 24.49 E.C.
0+13.89 B.C.
10+96.34 0+00.00 24" R.C.P.
Exist. T.P. #126995 M
Exist. T.P. #126996 M
10+56.19
B.C.
MATCH LINE 10+45.50 SEE SHEET 3
℄ CURVE DATA - 78" R.C.P. Sta 10+56.19 to Sta. 11+21.19 Δ = 82° 45' 45" R = 45' T = 39.65' L = 65.00'
51" R.C.P. SEE SHEET 10
See note, Sht. 3 for tree removal
PLAN
SCALE: 1" = 40'
25 0 50 100
TEST BORING No. 3 · STA. 13+60 50' E.
℄ STM. DRN. CURVE DATA Δ = 34° 30' 00" R = 45' T = 13.97' L = 27.10'
T.S. № 1
(32)
14+08.12 E.C.
14+33.53 M.H. № 3
14+37.53 B.C.
Roadway
15+08.65 E.C.
15+80.24 B.C.
TRACT № 29429
Toe of exist. slope
CONST. 71.12 L.F. 7'-10" x 4'-3" R.C.B. SEE DETAILS, SHT. 14
Exist. R.C. trans. & invert. REMOVE INTERFERING PORTIONS & REPLACE IN KIND. SEE SHT. 15 FOR CHANNEL RECONSTRUCTION DETAILS.
REMOVE INTERFERING PORTIONS OF EXIST. 54" R.C.P. SEAL WITH BRICK & MORTAR BOTH ENDS OF ABANDONED PIPE.
(2A)
Exist. 1" Gas line
Exist. 8" sewer (PC 1129)
J.S. № 1 A = 78° 08' C = 5.00' B = 24" D = 78" EL. "R" = 1.56 EL."S" = 1.50
(37)
BENCH MARK No. SY 3122
L.C.T. conc. base N.E. leg power transmission tower No. 44, ℄ Avalon Blvd, 70' ± S. ℄ Victoria St.
Gardena Quad. El. 45.570 1960 Adj.
Exist. P.P. #157826E
Exist. P.P. #157826E
Exist. P.P. #157826E & guy
Exist. P.P. #157826E
Exist. P.P. #157827E
Exist. 5' wide A.C. walk
Exist. 3" A.C. cap over 12" conc.
Exist. 12" conc. pvm't
Exist. 5" A.C. cap over 12" conc.
NORTH BOUND ROADWAY
Exist. 8" conc. over 16" base
Exist. 4" P.M.S. over 8" conc. over 24" base
Dept. of Water & Power R/W
Exist. 12" water line (Dominguez Water Corp.)
TEST BORING No. 4 · STA. 20+20 50' E.
C.B. № 1, L.D. № 4 T.C. ELEV. = ~~11.68~~ 11.29 ~~11~~ L.F. 18" R.C.P. 1500 D 2 ~~1~~
V = 1.20'
18+25 M.H. № 2
(31)
17+65.79
P.D. 669
Exist. 8" sewer (PC 1129)
"AS BUILT" DRAWING

PLANS PREPARED BY VOORHEIS-TRINDLE AND NELSON, INC.
Jack Mahoney
JACK MAHONEY R.E. 14,325

REVISIONS		
MARK	DATE	DESCRIPTION
■	3-6-68	"As built"

DRAWN BY V.T.N. TRACED BY V.T.N. CHECKED BY RECOMMENDED BY C.F. Caldwell DIVISION ENGINEER (DESIGN)
DESIGNED BY V.T.N. SUBMITTED BY C.W.H.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
DEL AMO CHANNEL — AVALON BLVD. STORM DRAIN LINE A
CONCRETE CONDUIT
STA. 10+45.50 TO STA. 23+00.00
PLAN, PROFILE & SECTION

APPROVED BY Walter W. Wood CHIEF ENGINEER

SCALE 1" = 40' | DATE JULY '66 | NO. 314-D2.4 | SHEET 4 OF 15

PROFILE

HORIZ. SCALE: 1"=40
VERT. SCALE: 1"= 4'

20 / 10 / 0

23+00.00 MATCH LINE

3.01 INV.

Exist. 15" sewer

Exist. 18" sewer

INVERT 78" R.C.P.

27+25.00 M.H.

12.28 F.S.

3.78 INV.

S= .0018

E'ly edge exist. conc. pavement

EQUATION: STA. 30+04.89 = P.T. BACK = STA. 30+03.04 AHEAD

31+86.04 M.H.

31+75 24" INLET (W)

4.60 INV.

5.62 top bell

Exist. 18" V.C.P. Sewer

(52) BLANKET PER STD. NO. 2-025! CASE IX-HALF SECTION D-D.

1.75 INV.

3+84.34 END 78" R.C.P.

3+95.04 BEG 69" R.C.P.

31+86.04 54" INLET (W)

4.61 INV.

32+37 24" INLET (E)

9.35 Top Pipe

Exist. 6" A.C. water line 12" steel casing.

INVERT 69" R.C.P. S= .0005

Exist. 15" sewer

35+65.00 M.H.

4.80 INV.

4.86 INV.

37+00.00 MATCH LINE

CONST. 884.19 L.F. 78" R.C.P. 1000 D (9)

CONST. 504.96 L.F. 69" R.C.P. 800 D (12)

M.H. No 4

LATERAL "F" SEE PROFILE SHEET 11

33 CATCH BASIN No. 8 ~~V=5.0~~ See C.O. # 6 & 10 24" C.M.P. + End Section

C.B. No 5 A2 gr. V= ~~5.0~~ See C.O. # 6 (43)

13.0 F.S. 1195.78 END 21" R.C.P.

& C.B.

Exist. gate

Exist. Fence

LATERAL "D" SEE PROFILE SHEET 11

CURVE DATA - & 21" R.C.P. Δ=98°25'00" R=30' B.C.=0+91.53 T=34.56' L=51.36' E.C.=1+42.89

Future 91' R/W line

32.90'

Future Rock & Oil road

Future curb

18.96'

69'

60'

CURVE DATA - & 21" R.C.P. B.C.=0+18.96 Δ=45°00'00" R=22.50' E.C.=0+36.63 T= 9.32' L=17.67'

106.00'

15'

Exist. 10" Oil line (Richfield Oil Co.)

Exist. 8" Oil line (Richfield Oil Co.)

Exist. 12" Gas line (Richfield Oil Co.)

23+00.00 MATCH LINE

41.5'

52'

65'

SOUTH BOUND ROADWAY

AVALON BLVD.

NORTH BOUND ROADWAY

677.89'

Exist. 15" V.C.P. Sewer

Exist. 18" V.C.P. sewer

Future curb

Dept. of Water & Power R/W

Exist. P.P.# 1537967E

Exist. P.P.# 1537969E

Exist. conc. block wall

Exist. P.P.# 1537971E

Exist. A.C. walk - 5 wide

Exist. Tel. conduit (Pac. Tel.)

Exist. P.P.# 1537972E

Exist. P.P.# 1537973E

(38) C.B. No. 1 - L.D. No. 4 ~~E=~~ L.F. 18" R.C.P. - 1500 D V= 1.5' SEE DETAIL-SHEET 12

(46) (29)

TEST BORINGS No. 5-51a, 26180 50' E.

M.H. No 2 (31)

22+54.88 P.T. 18° 08' 49" Lt.

EQUATION: STA. 30+04.89 = P.T. BACK = STA. 30+05.04 AHEAD

1.08 Rt.

TRACT No 29429

65'

68'

10'

Block wall

AVALON BLVD.

Fut. improvements

Oil lines

12" Gas (47.5' E/O ℄)

15" sewer (52' E/O ℄)

18" Sewer (57' E/O ℄)

STORM DRAIN (65' E/O ℄)

CROSS SECTION - STA. 27+00

SCALE: HORIZ: 1"=20' VERT: 1"=10'

CONST. 23 L.F. 4'-9"(W) x 3'-6"(H) R.C.B.-SEE DETAIL-SHEET No 14

CURVE DATA - & R.C.B. Δ=45°00'00" R= 22.50' T= 9.32' L= 17.67'

GOLF COURSE

(41) C.B. No 3 W=14' V=6.5' L.D. No 4 T.C. ELEV. = 13.11 MODIFY PER DETAIL-SHEET 12

Exist. earth ditch

St. R/W line

Future curb

15.7 F.S. 15.5 T.B.

DRAINAGE EASEMENT

Exist. valve & guard poles

Exist. 8" Transite Water line (Dominguez Water Co.)

Exist. 6" Water line (Dominguez Water Co.)

Exist. 8" conc. over 5" base

LATERAL "E" SEE PROFILE SHEET 11

105.00'

8" base

Exist. valve box

Dept. of Water & Power R/W

(34)

T.S. No. 1 Exist. 3" P.M.S. over 5" base 0+35.67 E.C. 11.50'

TEST BORING No. 6 STA. 33+40

Exist. 3" A.C. paving over 5" base

Exist. curb & gutter

Exist. 8" conc. over 5" base

Exist. 3" P.M.S. over 5" base

Exist. P.P.# 1328064E

Exist. P.P.# 1328062E

Exist. P.P.# 1328063E

Exist. M.H. (Pac. Tel.)

Exist. P.P.# 1328061E

Exist. conc. walk - 4' wide

M.H. No. 2

TRACT No 25660

37+00.00 MATCH LINE

Exist. 18" V.C.P. Sewer

Exist. 4" P.M.S. over 8" base

31+84.34 END 78" R.C.P.

4 Pt. 7°54'10" Lt. sprinkler valve

(38) M.H. No 4

A=45° B=54" C=9.00' D_1=69" D_2=78" EL. "R"=4.61 EL. "S"=4.60

EL SMERE DR.

Exist. curb & gutter

Exist. 18" V.C.P. Sewer

Exist. P.P.# 1353962

Exist. P.P.# 1353963E

Exist. P.P.# 1353964E

Exist. P.P.# 1353965E

Exist. P.P.# 1353966E

Exist. P.P.# 1353967E

Exist. P.P.# 1353968E

Exist. P.P.# 1353969E

Exist. P.P.# 1353970E

Exist. P.P.# 1353971E

Exist. P.P.# 1353972E

Exist. P.P.# 1353973E

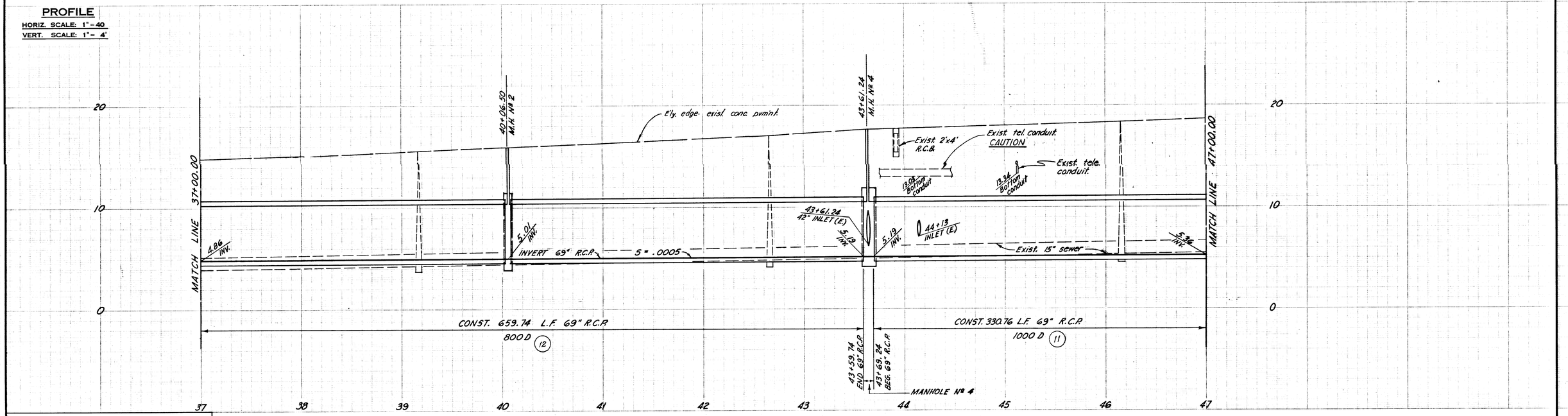
Exist. P.P.# 1353974E

Exist. P.P.# 1353975E

Exist. P.P.#

PROFILE

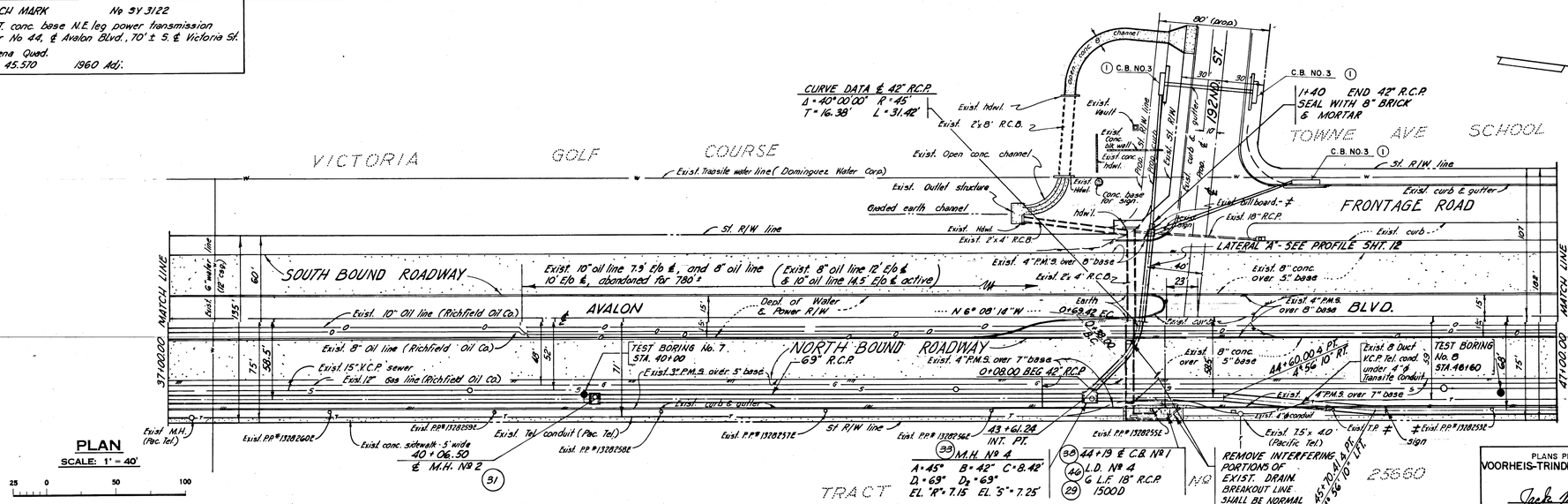
HORIZ. SCALE: 1"=40
VERT. SCALE: 1"= 4'

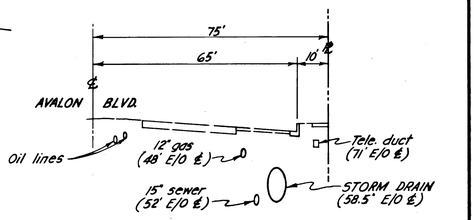


BENCH MARK No 3Y 3122
L.C.T. conc. base N.E. leg power transmission tower No 44, ℄ Avalon Blvd., 70' ± S. ℄ Victoria St.
Gardena Quad.
Elev. 45.570 1960 Adj.

PLAN

SCALE: 1" = 40'





CROSS SECTION - STA. 42+00
SCALE: HORIZ: 1" = 20'
VERT: 1" = 10'

"PD017038"

"AS BUILT" DRAWING

PLANS PREPARED BY
VOORHEIS-TRINDLE AND NELSON, INC.
Jack Mahoney
JACK MAHONEY R.E. 14,325

REVISIONS		
MARK	DATE	DESCRIPTION
①	8-24-73	PERMIT 67037 314-F28.2

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

DEL AMO CHANNEL — AVALON BLVD. STORM DRAIN
LINE A
CONCRETE CONDUIT
STA. 37+00.00 TO STA. 47+00.00
PLAN, PROFILE & SECTION

DRAWN BY V.T.N. | DESIGNED BY V.T.N.
TRACED BY V.T.N. | SUBMITTED BY C.W.N.
CHECKED BY
RECOMMENDED BY C. F. Gholson, DIVISION ENGINEER (Acting)
APPROVED BY Walter A. Hess, CHIEF ENGINEER

SCALE 1"=40' | DATE JULY, 1966 | NO. 314-D2.6 | SHEET 6 OF 15

PROFILE

HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

MATCH LINE STA. 47+00

48+20.00 M.H.

52+66.75 M.H.

56+50.00 M.H.

60+50.00 ℄ M.H.

MATCH LINE STA. 61+00

Ely edge exist. conc. pvmt.

Exist. traffic signal conduit

Exist. 10" water line

Exist. 6" gas line

Exist. telephone duct.

Exist. traffic signal conduit

Exist. 12" gas line

Exist. traffic signal conduit

20.63 F.S.

21.51 F.S.

Exist. 12" gas line

58+97.5 J.S. No. 2 36" INLET (E.)

≠ Exist. 8" water line

S=.0005

Exist. 15" sewer

S=.0124

S=.0124

S=.0024

5.36 INV.

5.42 INV.

5.52 INV.

6.3 INV.

49+93 18" INLET (E.)

J.S. No. 2 30" & 18" INLET (E.)

52+66.75 36" INLET (W.)

8.65 INV.

9.30 INV.

54+26.5 18" INLET (E.)

12.10 INV.

12.46 INV.

13.42 INV.

13.44 INV.

28 L.F. Exist 6" sewer house connections Reconst. per Std. Dwg. 2-D250 Case III (51)

231 L.F. Case IX

50+21.22 B.C.

50+85.13 E.C.

52+65.75 4 PT.-END 69" R.C.P.

55+00.00 G.B.

52+74.25 BEG 60" R.C.P.

CONST. 565.75 L.F. 69" R.C.P. 1000D (11)

CONST. 825.75 L.F. 60" R.C.P. 800D (13)

2.9' x 55' (44)

M.H. N° 4

47 48 49 50 51 52 53 54 55 56 57 58 59 60 61

(35) T.S. N° 3 A=45° B=27° C=4.92' D=30° D₂=36" EL. R'=12.26 EL. 3'=11.96

C.B. No. 7 - 2 GRATES L.D. No. 4

38 L.F. 27" R.C.P. 1750D (25)

Exist. 36" dia. palm tree 6.50

Exist. fire hyd.

Exist. 4.5' high C.L. fence

Exist. 8" Transite Water line (Dominguez Water Corp.)

Exist. 6" gas line (So. Cal. Gas)

Exist. 4" P.M.S.

Exist. curb & gutter

Exist. 8" Transite water line-16" cag. (Dominguez Water Corp.)

Exist. A.C. island

Exist. curb

Exist. conc. k-gutter, 8" thick

Exist. u.g. traffic signal conduits

J.S. No. 2 A=60° B=18" C=3.00 D=36" EL. R'=12.38 EL. 3'=12.16

Exist. traff. signals & control boxes

Exist. 4" P.M.S. over 8" base

Exist. 10" Oil line (Richfield Oil Co.)

Exist. 8" conc. over 5" base

Exist. 6" gas line (So. Cal. Gas)

Exist. 12" Gas line (Richfield Oil Co.)

Exist. 15" V.C.P. sewer (Dominguez)

Exist. 8" Transite water line

Exist. curb & gutter

Exist. P.P.

Exist. F.H.

Exist. tel conduit (Pac. Tel.)

(31) M.H. N° 2

Exist. 10" Transite Water line (Dominguez Water Corp.)

Exist. 6" Gas line (So. Cal. Gas)

Exist. P.P.

TRACT N° 25660

TOWNE AVE

SCHOOL

AVALON

J.S. No. 2 A=45° B=33" C=7.00 D=69" EL. R'=12.98 S=7.80'

R/W line

Exist. 10" oil line 7.9' E/o ℄ & 8" oil line 10' E/o ℄ abandoned for 780'±. Exist. 8" oil line 12' E/o ℄ & 10" oil line 14.5' E/o ℄ active

Exist. 8" oil line - Richfield Oil Co.

4" P.M.S. over 8" base

Exist. 1'-6" R.C.B.

Exist. T.P.* 1337375E

Exist. conc. drive

Exist. 1'-6" R.C.B.

Exist. T.P.* 1337375E

Exist. floodlights

Exist. 6" house connections

50+85.13 E.C.

50+21.22 B.C.

C.B. N° 2 L.D. N° 4

70 L.F. 18" R.C.P. 1500D (29)

8'

CURVE DATA - ℄ 69" R.C.P.
Δ = 6°06'10" R = 600'
T = 31.98' L = 63.91'

REMOVE INTERFERING PORTIONS OF EXIST. R.C.B. & SEAL WITH 8" BRICK & MORTAR BREAKOUT LINE SHALL BE NORMAL TO ℄ OF CULVERT

Exist. 6" house connection

Exist. A.C. Drive

Exist. T.P.* 1269870M

Planters with 2' high block wall

52+65.75 4 PT.

Sign (Conc. base)

52+66.75

C.B. N° 3 W=21' V'=5' 35 L.F. 35" R.C.P. 1750D L.D. N° 4

M.H. N° 4 Δ=45° B=36" C=7.92' D=60" D₂=69" EL. R'=10.04 EL. 3'=9.92

(20) (33) (42)

2020 P.C.

Exist. T.P.* 1269869M

Exist. traffic signal & control boxes

Exist. drain under walk with steel cover plate

Exist. open conc. drain

TEST BORING N° 9 STA. 54+35 - 77' E.

CURVE DATA - ℄ 36" R.C.P. Δ=45°00'00" R=22.50' T=9.32' L=17.67'

CONST. R.C. INLET STR. & 76.15 L.F. 18" R.C.P. 1500D - SEE DETAIL - SHT. 14 (47)

53+16.81 ℄ PT. 2'-4.81' Rt.

Exist. 8" Gas line (So. Cal. Gas Co.)

REMOVE EXIST. 8" DIA. TREE 17.22'

C.B. N° 2, V=4.75' V=5.25' L.D. N° 4 (39) (46)

C.B. N° 2, V=4.5' (front to back dim. = 2'-6") L.D. N° 4

45 L.F. 27" R.C.P. 1750D

15.2' x 2'

Exist. brick ret. wall & 4' high C.L. fence

6.50 Hedges

Exist. st. light std.

Exist. 12" dia. palm trees

9.50

Exist. 10" V.C.P. sewer

12 FEET OUT OF PT

74 L.F. 18" R.C.P. - 1500D - L.D. N° 4 (38)

Exist. 8" V.C.P. sewer

C.B. No. 1 - V=4.50'

LATERAL "B" SEE "PROFILE" - SHEET N° 12.

Exist. u.g. traffic signal conduits

Dept. of Water & Power R/W

Exist. 4" P.M.S. over 7" base

Exist. barricade

Fut. curb

R/W line

Exist. T.P.* 1269968M

Exist. T.P.* 1269967M

Exist. T.P.* 1269965M

Exist. T.P.* 1269964M

Exist. 24" C.M.P.

M.H. N° 2

TEST BORING No. 10 STA. 59+80 - 77' E.

(18) CONST. 4 L.F. 36" R.C.P. - 1500D SEAL WITH 8" BRICK & MORTAR

PROP. 12" Exist. 12"

Future improvements

AVALON BLVD.

12" Gas (47.6' E/O ℄)

Oil lines

Tele. duct (70' E/O ℄)

STORM DRAIN (56' E/O ℄)

SOUTH BOUND ROADWAY

NORTH BOUND ROADWAY

FRONTAGE ROAD

BLVD.

N 0° 02' 04" W

≠ Exist. 8" water line (Dominguez Water Corp.)

TRACT N° 16879

BENCH MARK No. SY3122
L. & T. conc. base N.E. leg power transmission tower No. 44, ℄ Avalon Blvd., 70'± S ℄ Victoria St.
Gardena Quad.
Elev. 45.570 1960 Adj.

PLAN
SCALE: 1" = 40'
25 0 50 100

CROSS SECTION - STA. 55+00
SCALE: HORIZ: 1" = 20'
VERT: 1" = 10'

PLANS PREPARED BY
VOORHEIS-TRINDLE AND NELSON, INC.
Jack Mahoney
JACK MAHONEY R.E. 14,325

"AS BUILT" DRAWING

REVISIONS		
MARK	DATE	DESCRIPTION
■	3-6-68	"As built"

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

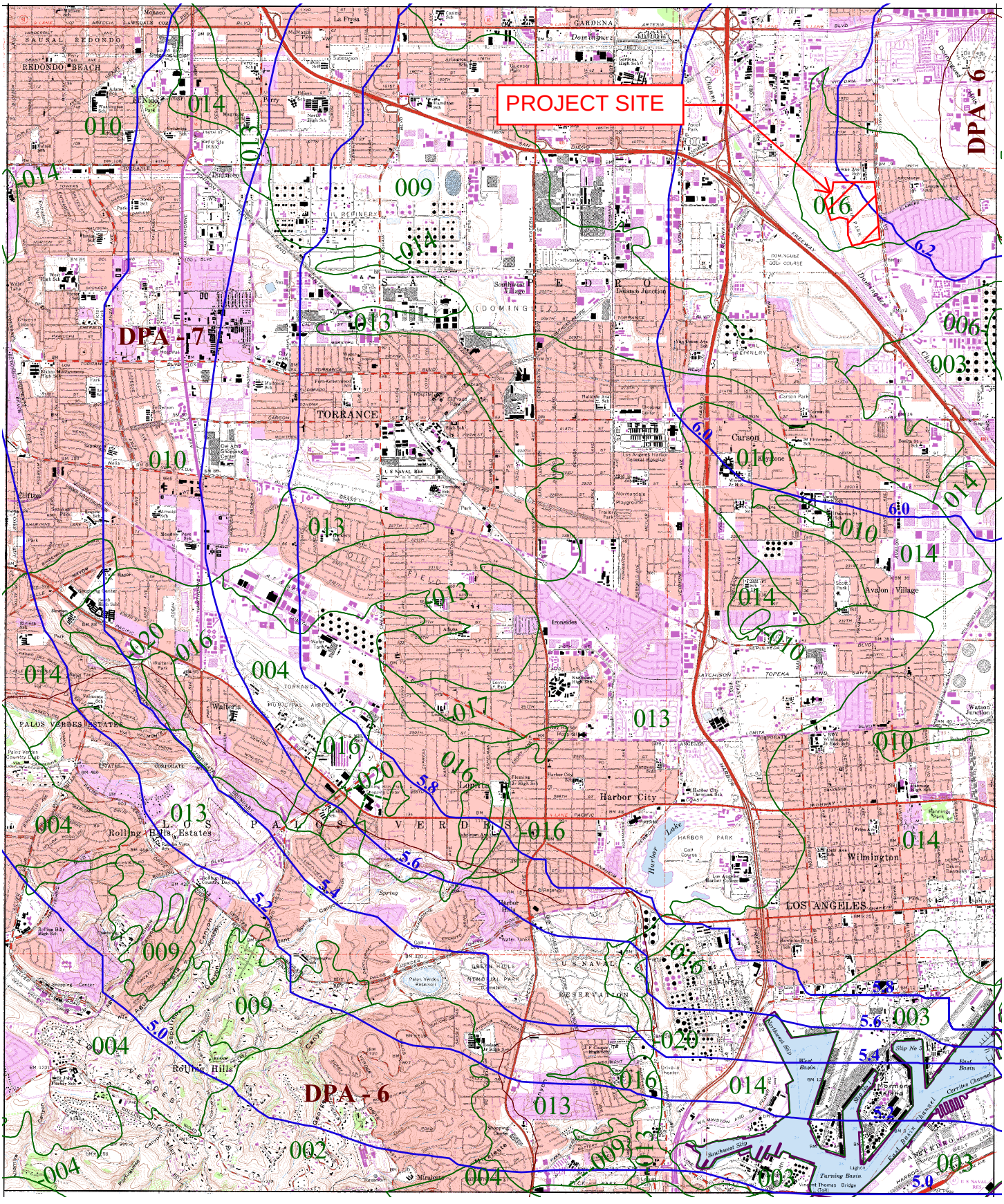
DEL AMO CHANNEL — AVALON BLVD. STORM DRAIN
LINE A
CONCRETE CONDUIT
STA. 47+00.00 TO STA. 61+00.00
PLAN, PROFILE & SECTION

DRAWN BY V.T.N. | TRACED BY V.T.N. | CHECKED BY | RECOMMENDED BY ℄ F. Eckdhl, DIVISION ENGINEER (Design)
DESIGNED BY V.T.N. | SUBMITTED BY C.W.H.
APPROVED BY Walter J. Wood, CHIEF ENGINEER
SCALE 1" = 40' | DATE JULY, 1966 | NO. 314-D2.7 | SHEET 7 OF 15

PD017038

APPENDIX C

County of Los Angeles Department of Public Works Soil and Precipitation Map



016 SOIL CLASSIFICATION AREA

7.2 INCHES OF RAINFALL

DPA - 6 DEBRIS POTENTIAL AREA

N W E S

1 0 1 2 Miles

25-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.878
10-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.714

TORRANCE
50-YEAR 24-HOUR ISOHYET

1-H1.4

LOS ANGELES COUNTY PUBLIC WORKS Public Service That Works

APPENDIX D

Excerpt from the March 2014 Contaminated Sediment Management Plan: Dominguez Channel Estuary

1.1 Setting: Dominguez Channel and Dominguez Channel Estuary

Dominguez Channel is a channelized stormwater conveyance system beginning at 116th Street in the city of Hawthorne and runs in a generally southerly direction, passing through the cities of Gardena, Torrance, Carson, and Los Angeles and the unincorporated County of Los Angeles before discharging into Consolidated Slip within the Port of Los Angeles (POLA). Historically, the southern end of the Dominguez Channel consisted of marshes and wetlands. This area was dredged in the early twentieth century to create the Los Angeles/Long Beach Harbor. The channelization of this drainage system in the 1960s ended ongoing flooding concerns and provided land for the construction of homes and businesses (City of Los Angeles 2014). The Dominguez Watershed Management Area (WMA) is shown in Figure 1. The Dominguez WMA includes the drainage area of the Dominguez Channel, Machado Lake, and the Los Angeles/Long Beach Harbor watersheds. Approximately 93 percent of the land within the Dominguez WMA is developed with 41 percent industrial, commercial, and transportation land uses and 40 percent residential development. The eastern portion of the watershed near the Dominguez Channel has a high concentration of industrial uses with very little vacant and open spaces present. Of the six Watershed Management Areas within Los Angeles County, the Dominguez WMA has the highest ratio of impervious land cover (Weston 2005).

The Dominguez Channel Watershed is divided into two sub-watersheds. The upper watershed is the portion that drains to the concrete-lined, rectangular reach of the Dominguez Channel (above Vermont Avenue). The lower watershed consists of the drainage area tributary to the DCE. The lower watershed also includes the Torrance Lateral, which is a significant tributary channel to the DCE. The combined drainage area is approximately 72 square miles (or approximately 62 percent of the Dominguez WMA). The remaining areas of the Dominguez WMA drain into Machado Lake, or directly into the Los Angeles/Long Beach Harbor (MEC 2004). A brief description of the channel and adjacent land use is provided in *Dominguez Watershed Management Master Plan* (MEC 2004).



Figure 1

Dominguez Watershed Management Area

The Dominguez Channel Watershed contains two Superfund sites: the Montrose Chemical Corporation (Montrose) site and the Del Amo site. Montrose manufactured Dichlorodiphenyltrichloroethane (DDT) on a 13-acre site in a light industrial/residential area in the city of Torrance from 1947 to 1982. Contaminants of concern at the Montrose site are DDT, chlorobenzene, and benzene hexachloride. DDT has been found in soils at the former plant property and surrounding areas, in sediments and soils in the historical stormwater pathway from the site (Kenwood Drain), and in the groundwater close to the former plant property.

Shell Oil Company (Shell), Dow Chemical Company, and several other companies operated the Del Amo Synthetic Rubber Manufacturing plant from 1955 to 1972 to produce synthetic rubber for the United States military operations. In 1972 the plant was dismantled, and the buildings were demolished (USEPA 1999). Contaminants of concern at the Del Amo site are volatile organic compounds, including benzene and toluene, Polycyclic Aromatic Hydrocarbons (PAHs), and semi-volatile organic compounds (Lyons and Birosik 2007).

1.2 Dominguez Channel Toxics TMDL

California's 303(d) List of Water Quality Limited Segments (SWRCB 2006) includes three areas of Dominguez Channel: lined portion above Vermont Avenue, unlined portion below Vermont Avenue (also referred to as DCE), and Torrance Lateral (also referred to as Torrance Carson Channel). The upper, freshwater portion consists of 6.7 miles of the channel located above Vermont Avenue and is constructed of reinforced concrete with vertical sides. Below Vermont Avenue, the channel changes to a trapezoidal compacted earth bottom channel with riprap banks. The 8.3 miles from Vermont Avenue to Consolidated Slip is subjected to tidal flows (WBMWD 2009) and is identified as the DCE on the 303(d) List.

On March 23, 2012, the Dominguez Channel Toxics TMDL became effective and was promulgated to protect and restore fish tissue, water, and sediment quality in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters by remediating contaminated sediments and controlling the sediment loading and accumulation of contaminated sediments in the Dominguez Channel Watershed.

Total maximum daily loads (TMDLs) are established to attain and maintain applicable water quality standards for impaired waterbodies. TMDLs provide pollutant limits that are implemented through permits (Municipal Separate Storm Sewer System [MS4], other National Pollutant Discharge Elimination System [NPDES] permits, etc.). This CSMP has been developed in response to the Dominguez Channel Toxics TMDL, which addresses localized sediment quality and regional fish tissue quality and is expected to achieve attainment of fish tissue, water, and sediment quality through source reduction, source control, management actions, and Monitored Natural Recovery (MNR).

1.2.1 TMDL Compliance

The Dominguez Channel Toxics TMDL set Waste Load Allocations (WLAs) in waterbodies within the Dominguez Channel Watershed to limit sediment-bound pollutant loadings from upstream and on-land sources. In addition, the Dominguez Channel Toxics TMDL set LAs in waterbodies to limit concentrations in bedded sediments believed to impact marine benthos (direct effects) and fish tissue (indirect effects). Mass-based limits for chemical constituents are provided in Table 1 and Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region (Basin Plan Amendment; RWQCB and USEPA 2011).

Table 1

Final, Mass-Based TMDLs and Allocations for Metals, PAHs, DDT, and PCBs

Waterbody	Total Copper (kg/year)	Total Lead (kg/year)	Total Zinc (kg/year)	Total PAHs (kg/year)	TDDT (g/year)	Total PCBs (g/year)
Dominguez Channel Estuary	84	115.4	370.5	9.94	3.9	7.9

Notes:
g = gram
kg = kilogram
TDDT = total DDT

Compliance with sediment allocations may be demonstrated via any one of three different means:

1. Final sediment allocations, as presented in the Basin Plan Amendment (RWQCB and USEPA 2011), are met.
2. The qualitative sediment condition ranking of "unimpacted" or "likely unimpacted" by interpreting and integrating Multiple Lines of Evidence (MLOE) as defined in the Sediment Quality Objective (SQO) Part 1 is met, except for chromium which is not included in the SQO Part 1.
3. Sediment numeric targets are met in bedded sediments over a 3-year averaging period.

The SQO program provides guidance for applying the *Water Quality Control Plan for Enclosed Bays and Estuaries: Sediment Quality Plan* (SWRCB 2009). SQOs have been developed for contaminants of concern in bays and estuaries in California based on an approach that incorporates MLOE (Bay et al. 2009). These MLOE include sediment chemistry, sediment toxicity, and benthic community condition.

Compliance with fish tissue targets may be demonstrated via any one of four different means:

1. Fish tissue targets are met in species resident to the Dominguez Channel Toxics TMDL waterbodies.
2. Final sediment allocations, as presented in the Basin Plan Amendment (RWQCB and USEPA 2011), are met.
3. Sediment numeric targets to protect fish tissue are met in bed sediment over a 3-year averaging period.
4. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the *Water Quality Control Plan for Enclosed Bays and Estuaries: Sediment Quality Plan* (SWRCB 2009), as amended to address contaminants in resident finfish and wildlife.

Numeric targets, implementation schedules, and listed contaminants of concern may be revised during the TMDL reopener, tentatively scheduled for spring 2018.

APPENDIX E
HydroCalc Exported Values

Peak Flow Hydrologic Analysis

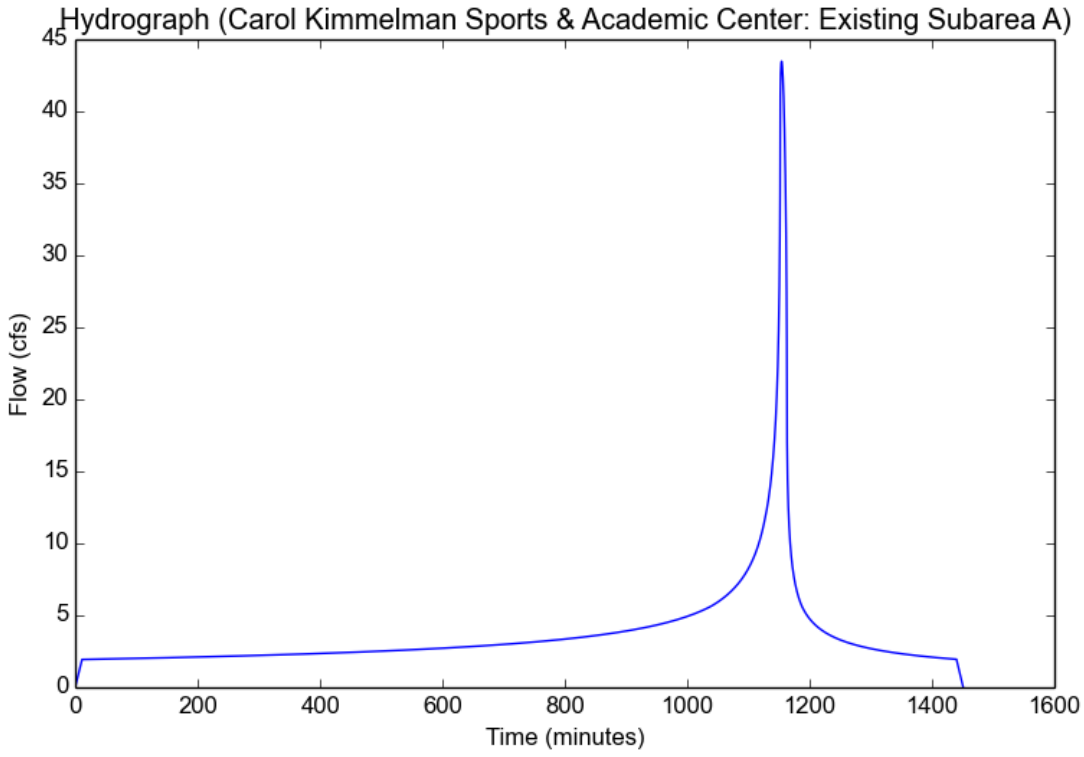
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Existing Sub
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Existing Subarea A
Area (ac)	19.3
Flow Path Length (ft)	1005.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.79
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.5536
Undeveloped Runoff Coefficient (Cu)	0.8149
Developed Runoff Coefficient (Cd)	0.8821
Time of Concentration (min)	11.0
Clear Peak Flow Rate (cfs)	43.4755
Burned Peak Flow Rate (cfs)	45.3306
24-Hr Clear Runoff Volume (ac-ft)	7.451
24-Hr Clear Runoff Volume (cu-ft)	324563.7469



Peak Flow Hydrologic Analysis

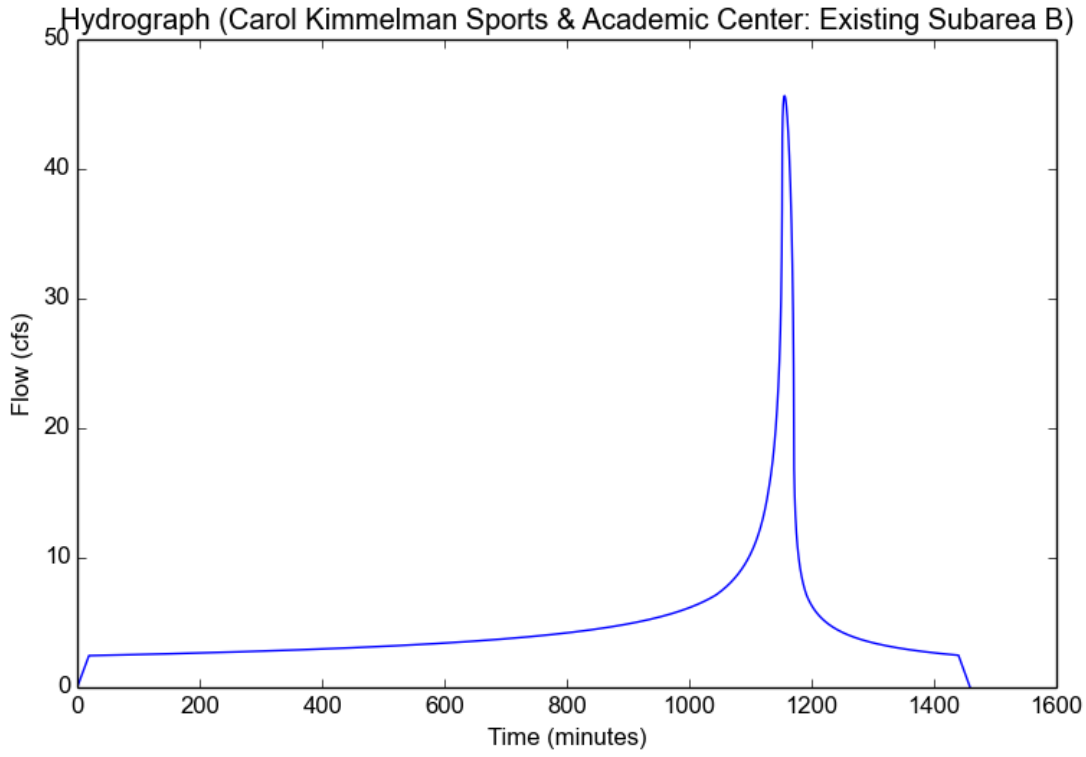
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Existing Sub
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Existing Subarea B
Area (ac)	27.0
Flow Path Length (ft)	2355.0
Flow Path Slope (vft/hft)	0.008
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.7
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	1.9751
Undeveloped Runoff Coefficient (Cu)	0.7534
Developed Runoff Coefficient (Cd)	0.856
Time of Concentration (min)	19.0
Clear Peak Flow Rate (cfs)	45.6501
Burned Peak Flow Rate (cfs)	47.998
24-Hr Clear Runoff Volume (ac-ft)	9.5495
24-Hr Clear Runoff Volume (cu-ft)	415975.8305



Peak Flow Hydrologic Analysis

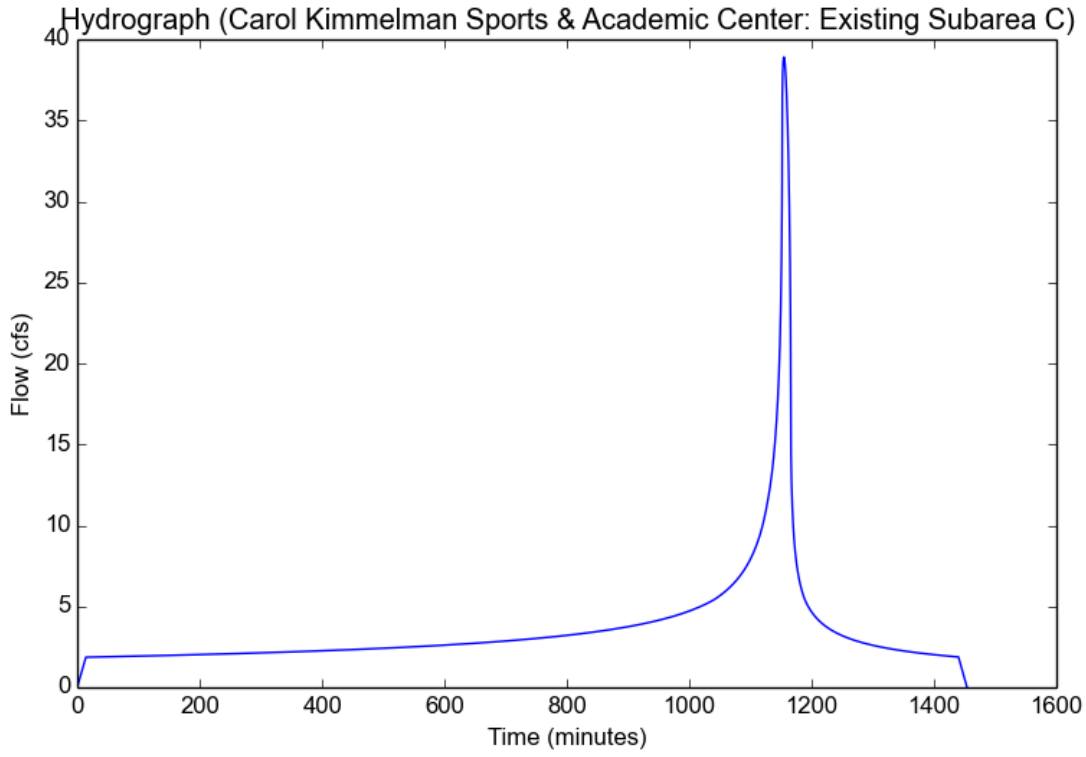
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Existing Sub
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Existing Subarea C
Area (ac)	19.6
Flow Path Length (ft)	1719.0
Flow Path Slope (vft/hft)	0.013
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.74
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.28
Undeveloped Runoff Coefficient (Cu)	0.7872
Developed Runoff Coefficient (Cd)	0.8707
Time of Concentration (min)	14.0
Clear Peak Flow Rate (cfs)	38.9087
Burned Peak Flow Rate (cfs)	40.7198
24-Hr Clear Runoff Volume (ac-ft)	7.215
24-Hr Clear Runoff Volume (cu-ft)	314285.1803



Peak Flow Hydrologic Analysis

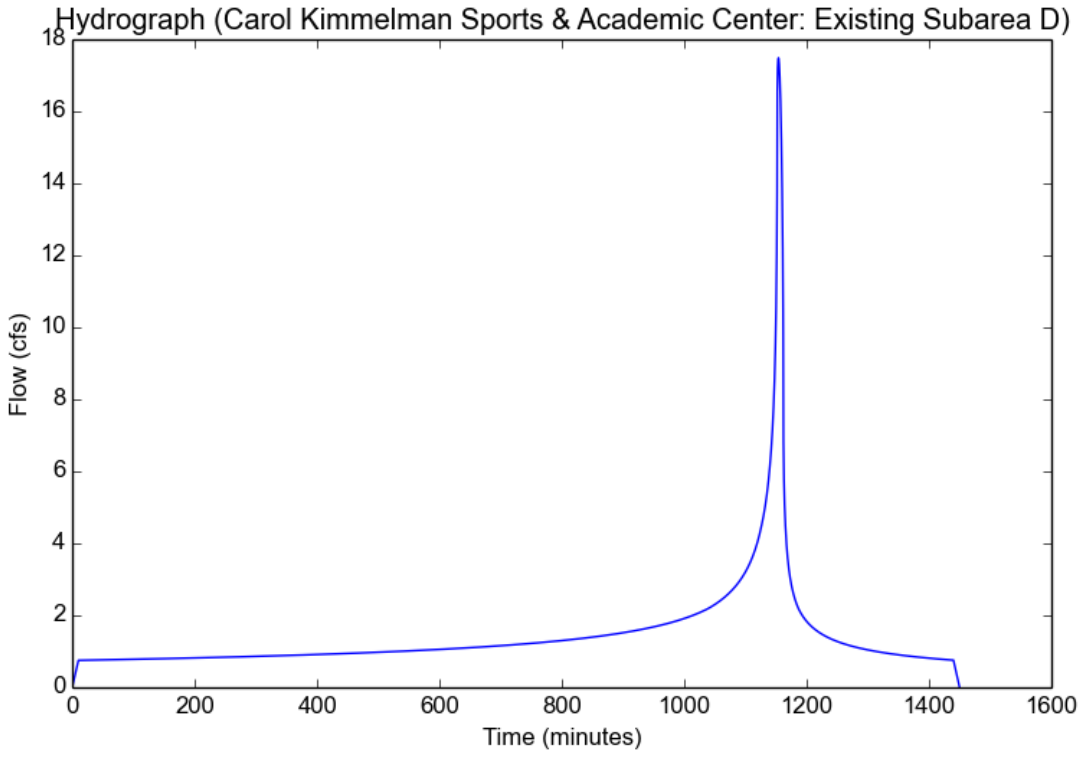
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Existing Sub
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Existing Subarea D
Area (ac)	7.4
Flow Path Length (ft)	952.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.8
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.6706
Undeveloped Runoff Coefficient (Cu)	0.8239
Developed Runoff Coefficient (Cd)	0.8848
Time of Concentration (min)	10.0
Clear Peak Flow Rate (cfs)	17.4856
Burned Peak Flow Rate (cfs)	18.218
24-Hr Clear Runoff Volume (ac-ft)	2.8834
24-Hr Clear Runoff Volume (cu-ft)	125601.3164



Peak Flow Hydrologic Analysis

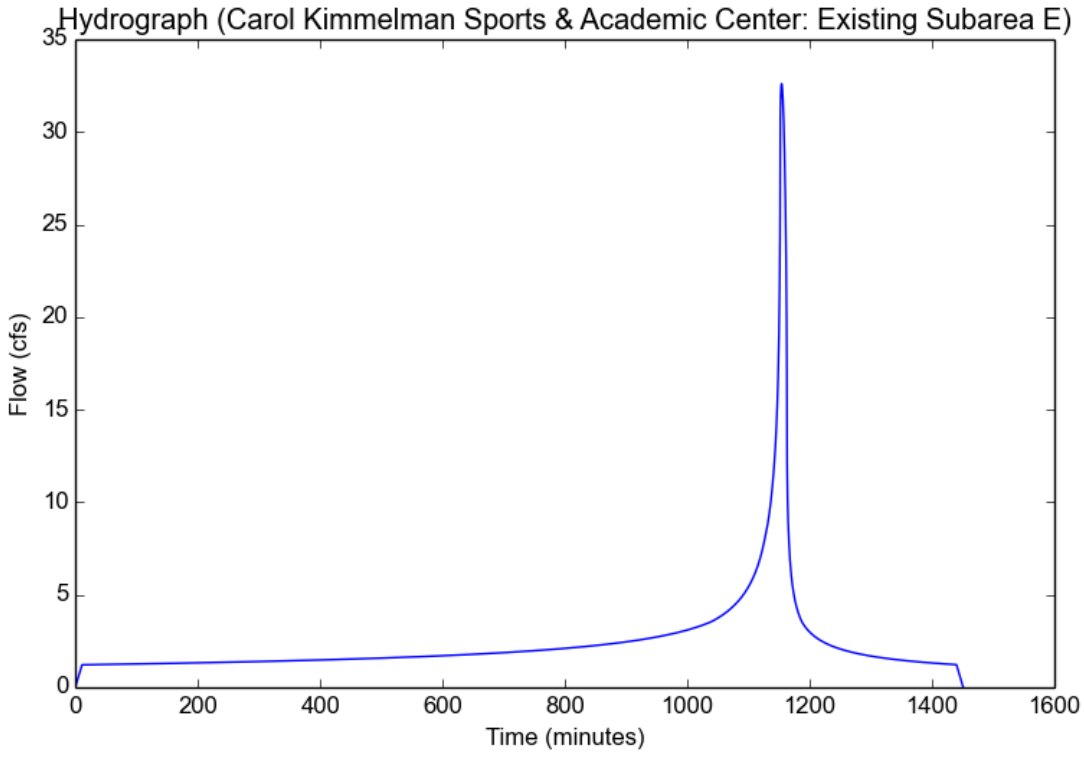
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Existing Sub
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Existing Subarea E
Area (ac)	14.7
Flow Path Length (ft)	1222.0
Flow Path Slope (vft/hft)	0.018
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.63
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.5536
Undeveloped Runoff Coefficient (Cu)	0.8149
Developed Runoff Coefficient (Cd)	0.8685
Time of Concentration (min)	11.0
Clear Peak Flow Rate (cfs)	32.6023
Burned Peak Flow Rate (cfs)	34.1785
24-Hr Clear Runoff Volume (ac-ft)	4.834
24-Hr Clear Runoff Volume (cu-ft)	210568.5153



Peak Flow Hydrologic Analysis

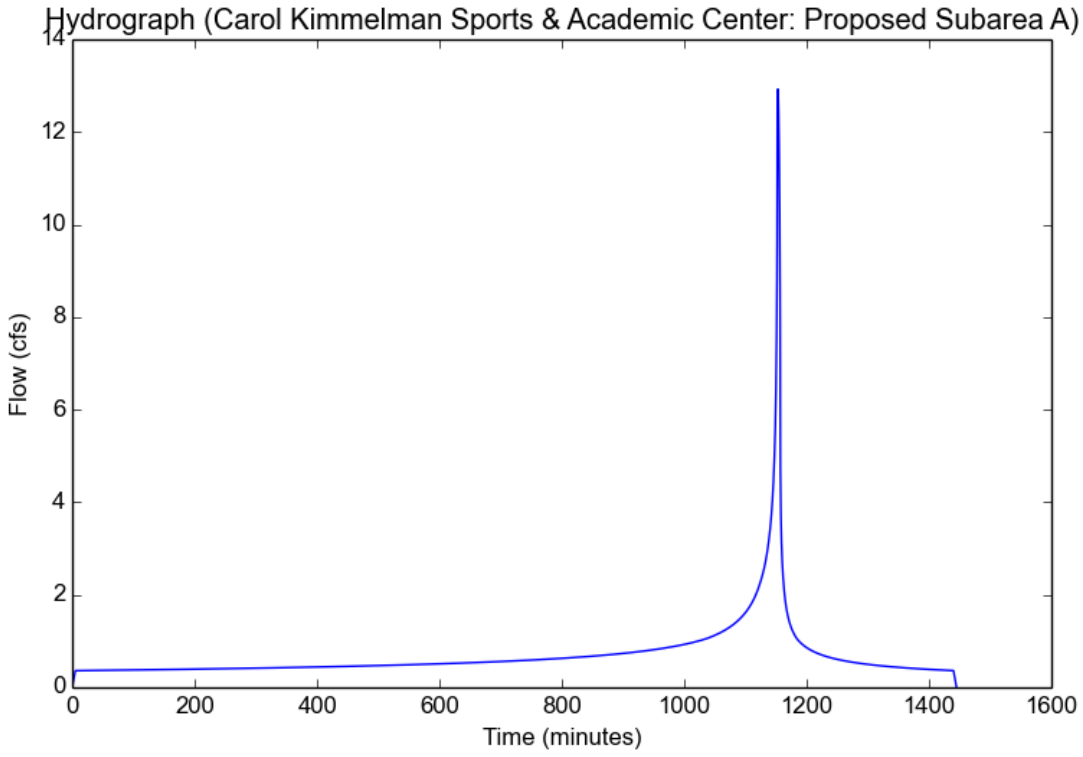
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea A
Area (ac)	3.9
Flow Path Length (ft)	360.0
Flow Path Slope (vft/hft)	0.022
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.72
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8959
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	12.9242
Burned Peak Flow Rate (cfs)	13.4324
24-Hr Clear Runoff Volume (ac-ft)	1.4085
24-Hr Clear Runoff Volume (cu-ft)	61352.3751



Peak Flow Hydrologic Analysis

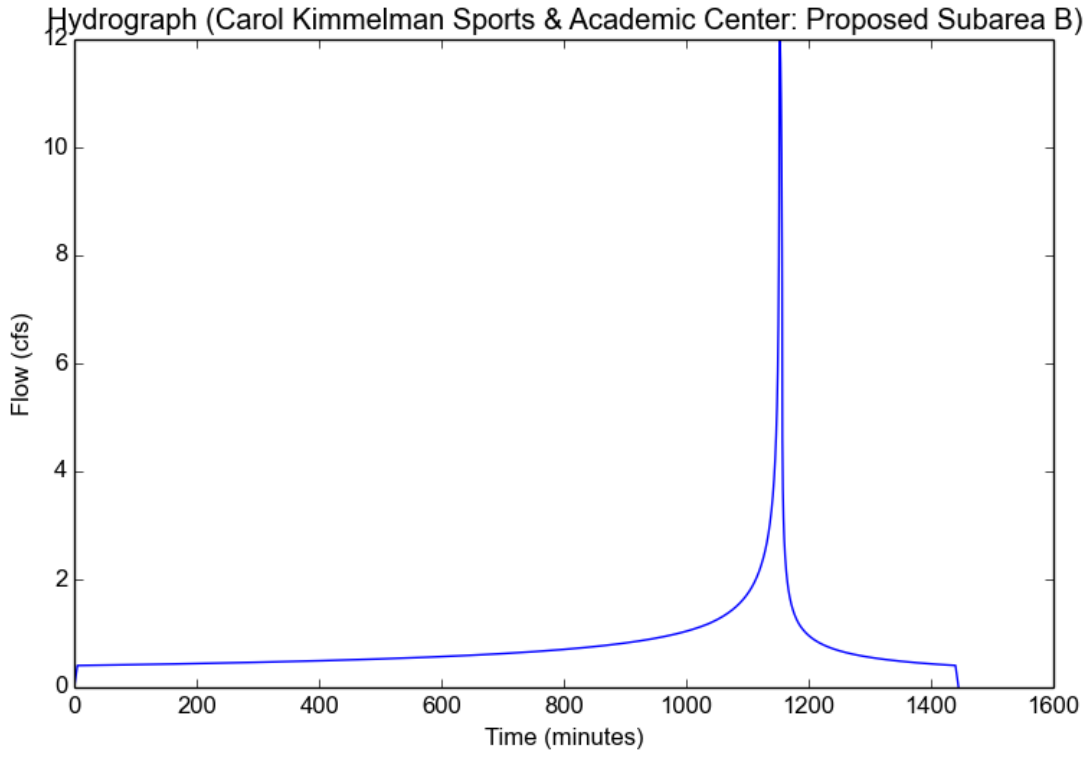
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea B
Area (ac)	3.6
Flow Path Length (ft)	345.0
Flow Path Slope (vft/hft)	0.02
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.9
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8985
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	11.9654
Burned Peak Flow Rate (cfs)	12.4225
24-Hr Clear Runoff Volume (ac-ft)	1.5316
24-Hr Clear Runoff Volume (cu-ft)	66715.4437



Peak Flow Hydrologic Analysis

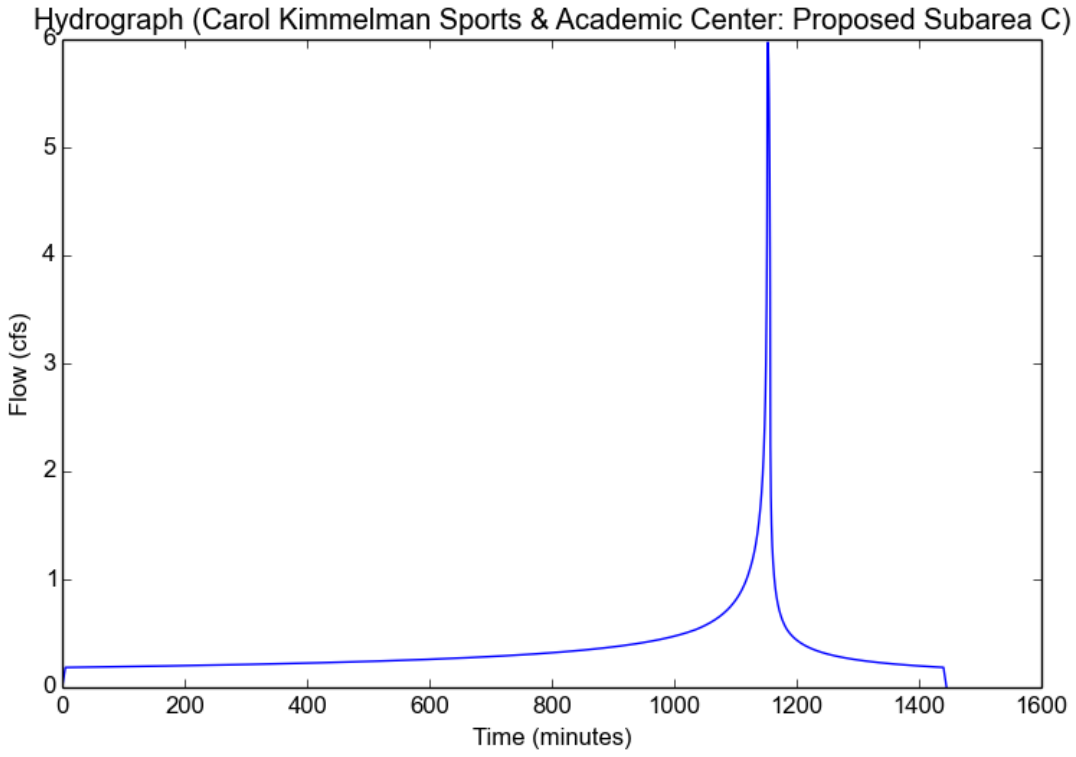
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea C
Area (ac)	1.8
Flow Path Length (ft)	323.0
Flow Path Slope (vft/hft)	0.008
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.81
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8972
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	5.9738
Burned Peak Flow Rate (cfs)	6.2054
24-Hr Clear Runoff Volume (ac-ft)	0.7079
24-Hr Clear Runoff Volume (cu-ft)	30837.1013



Peak Flow Hydrologic Analysis

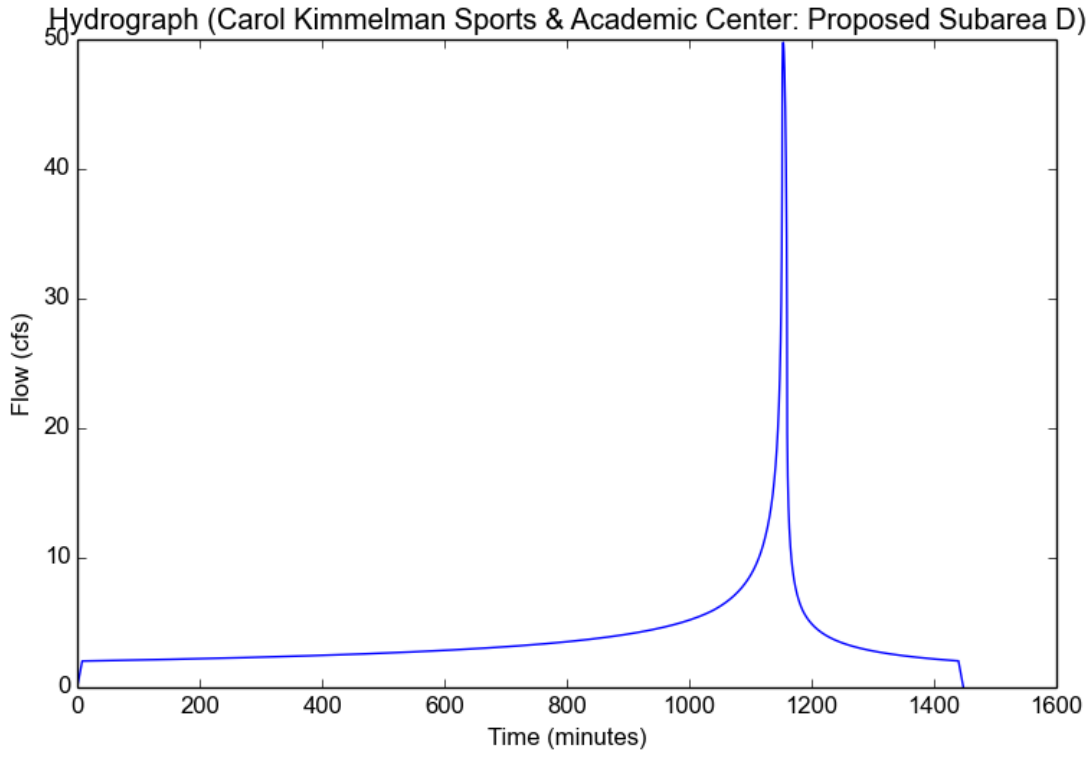
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea D
Area (ac)	18.8
Flow Path Length (ft)	585.0
Flow Path Slope (vft/hft)	0.009
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.86
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.9659
Undeveloped Runoff Coefficient (Cu)	0.8468
Developed Runoff Coefficient (Cd)	0.8925
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	49.7676
Burned Peak Flow Rate (cfs)	51.7273
24-Hr Clear Runoff Volume (ac-ft)	7.7291
24-Hr Clear Runoff Volume (cu-ft)	336681.0483



Peak Flow Hydrologic Analysis

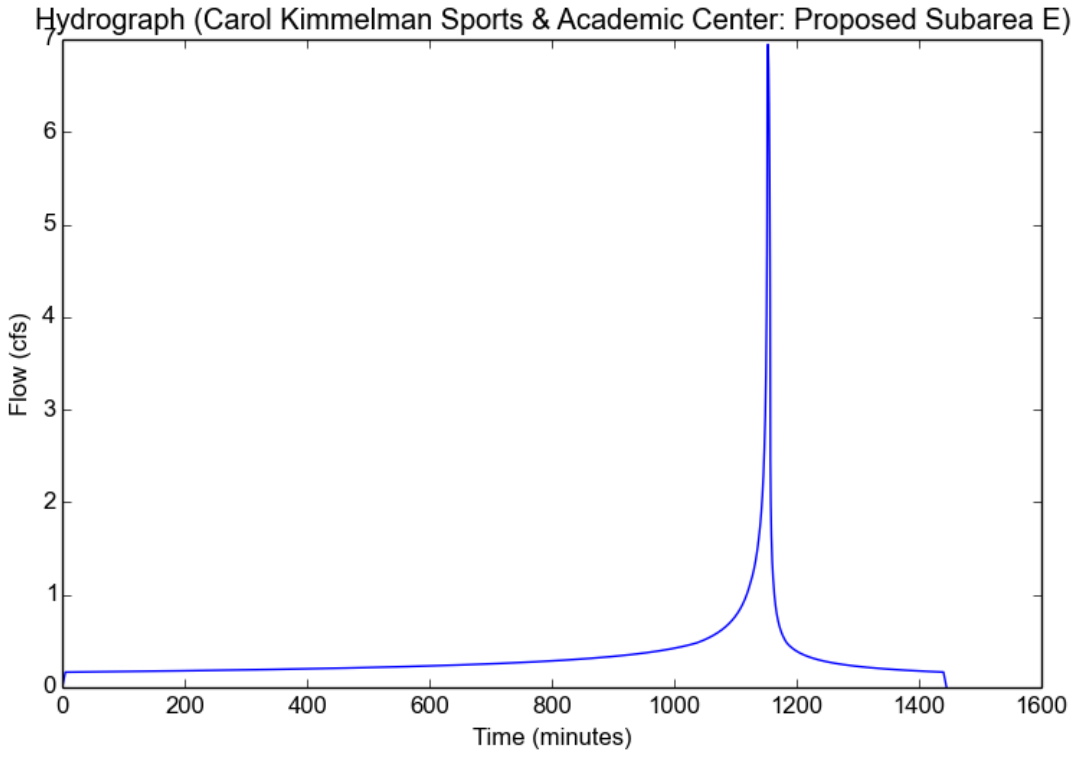
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea E
Area (ac)	2.1
Flow Path Length (ft)	360.0
Flow Path Slope (vft/hft)	0.011
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.59
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8939
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	6.9443
Burned Peak Flow Rate (cfs)	7.2229
24-Hr Clear Runoff Volume (ac-ft)	0.6609
24-Hr Clear Runoff Volume (cu-ft)	28788.1819



Peak Flow Hydrologic Analysis

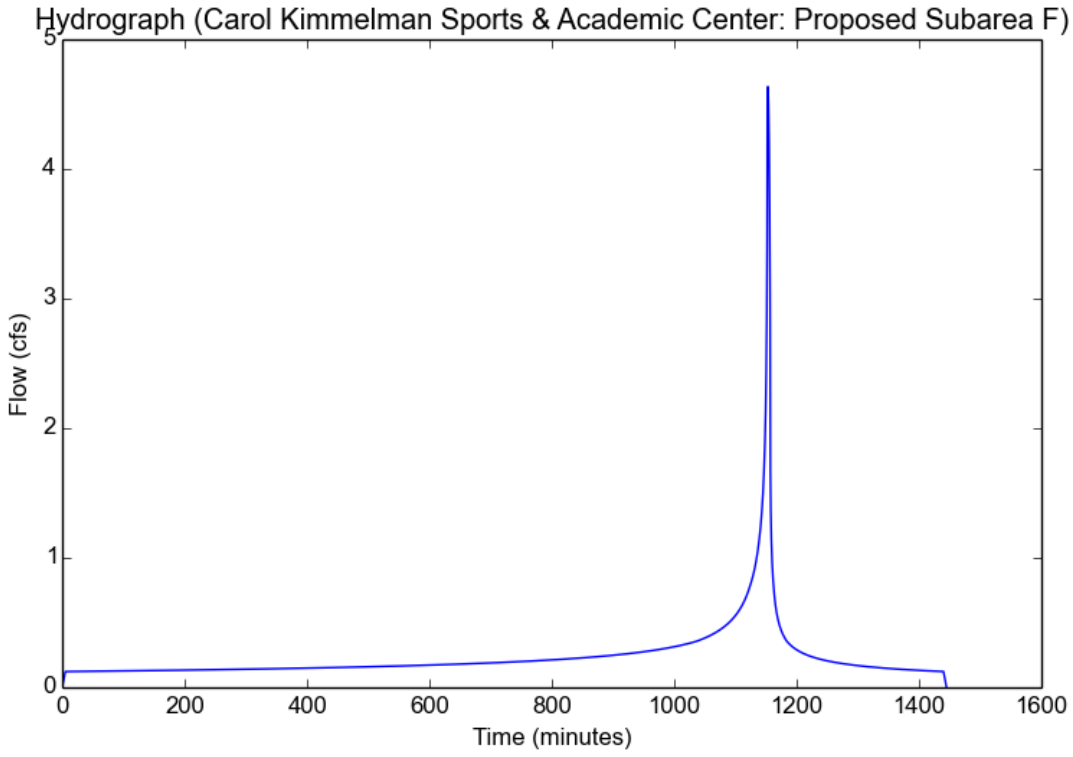
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea F
Area (ac)	1.4
Flow Path Length (ft)	318.0
Flow Path Slope (vft/hft)	0.015
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.67
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8951
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	4.6356
Burned Peak Flow Rate (cfs)	4.8193
24-Hr Clear Runoff Volume (ac-ft)	0.4806
24-Hr Clear Runoff Volume (cu-ft)	20934.7725



Peak Flow Hydrologic Analysis

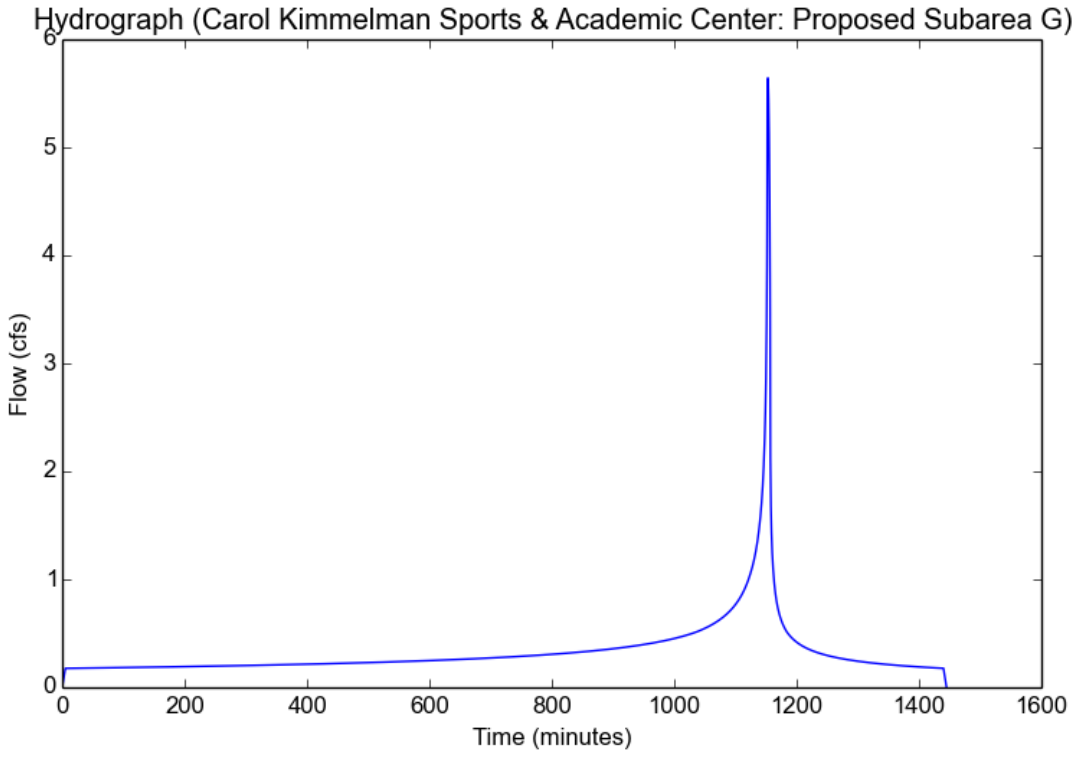
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea G
Area (ac)	1.7
Flow Path Length (ft)	291.0
Flow Path Slope (vft/hft)	0.04
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.82
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8973
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	5.6429
Burned Peak Flow Rate (cfs)	5.8613
24-Hr Clear Runoff Volume (ac-ft)	0.6747
24-Hr Clear Runoff Volume (cu-ft)	29388.4386



Peak Flow Hydrologic Analysis

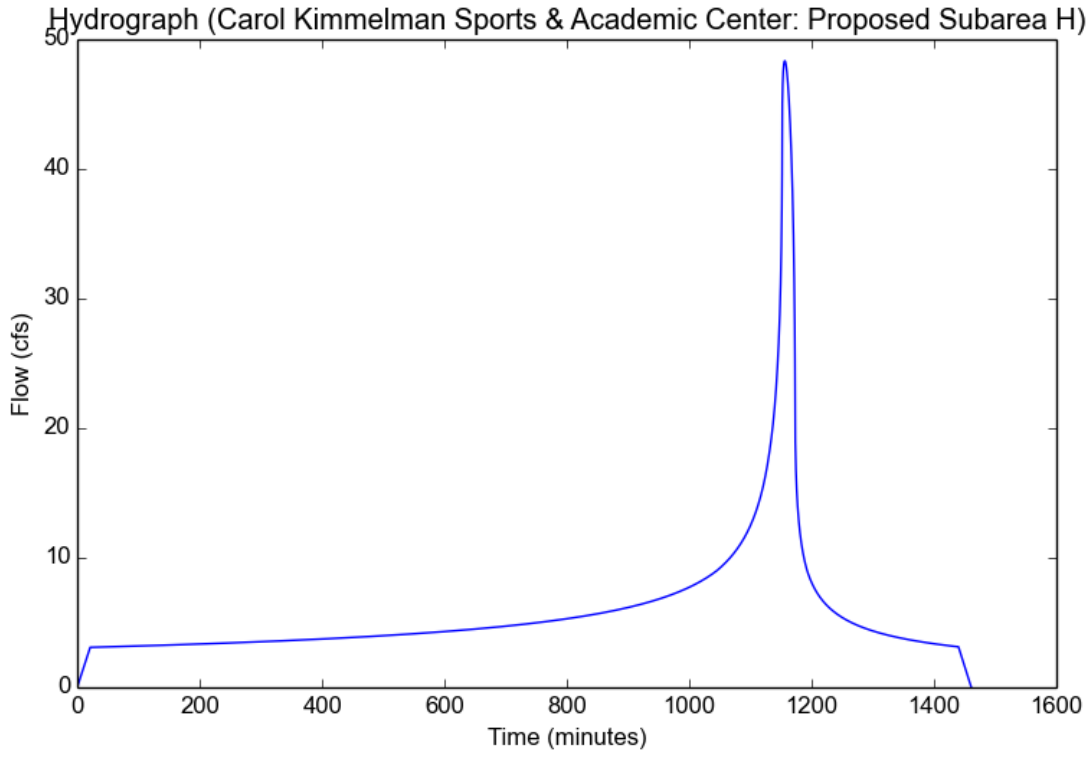
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea H
Area (ac)	29.4
Flow Path Length (ft)	2023.0
Flow Path Slope (vft/hft)	0.003
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.83
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	1.8844
Undeveloped Runoff Coefficient (Cu)	0.7389
Developed Runoff Coefficient (Cd)	0.8726
Time of Concentration (min)	21.0
Clear Peak Flow Rate (cfs)	48.3437
Burned Peak Flow Rate (cfs)	50.4838
24-Hr Clear Runoff Volume (ac-ft)	11.7666
24-Hr Clear Runoff Volume (cu-ft)	512553.2867



Peak Flow Hydrologic Analysis

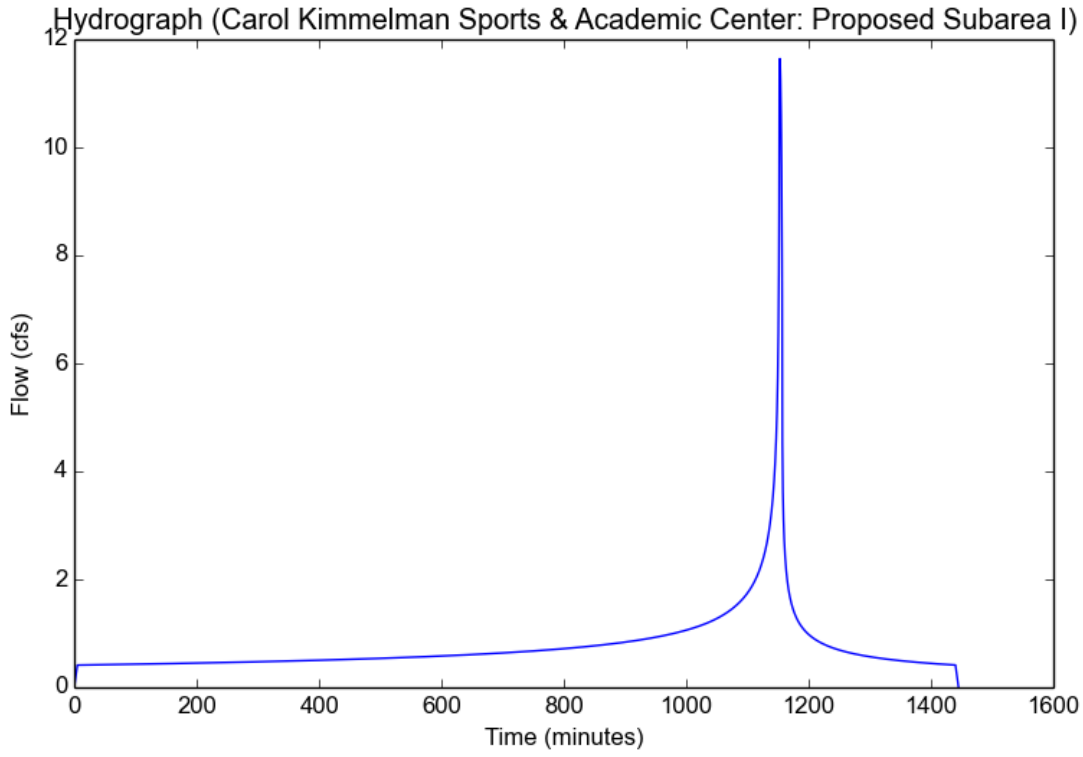
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea I
Area (ac)	3.5
Flow Path Length (ft)	320.0
Flow Path Slope (vft/hft)	0.026
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.95
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8993
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	11.6426
Burned Peak Flow Rate (cfs)	12.0838
24-Hr Clear Runoff Volume (ac-ft)	1.5515
24-Hr Clear Runoff Volume (cu-ft)	67585.1295



Peak Flow Hydrologic Analysis

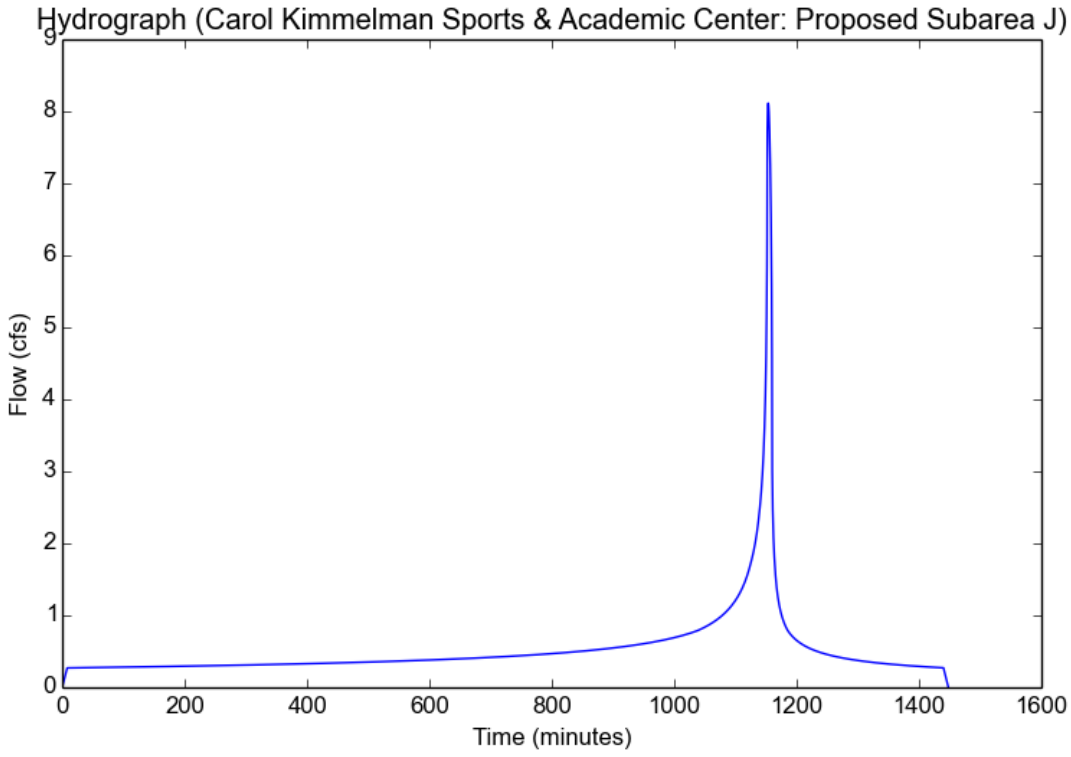
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Proposed Su
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Proposed Subarea J
Area (ac)	3.1
Flow Path Length (ft)	613.0
Flow Path Slope (vft/hft)	0.007
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.67
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.9659
Undeveloped Runoff Coefficient (Cu)	0.8468
Developed Runoff Coefficient (Cd)	0.8824
Time of Concentration (min)	8.0
Clear Peak Flow Rate (cfs)	8.1134
Burned Peak Flow Rate (cfs)	8.4669
24-Hr Clear Runoff Volume (ac-ft)	1.064
24-Hr Clear Runoff Volume (cu-ft)	46347.2993



Peak Flow Hydrologic Analysis

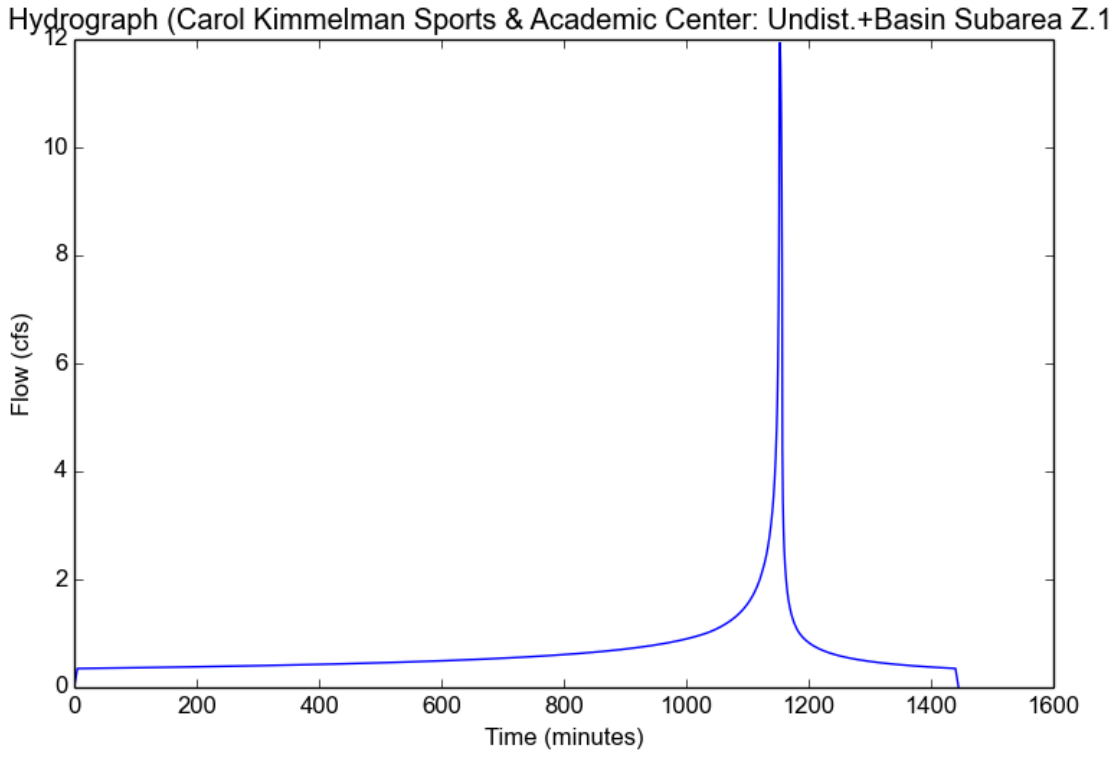
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Undisturbed
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Undist.+Basin Subarea Z.1
Area (ac)	3.6
Flow Path Length (ft)	232.0
Flow Path Slope (vft/hft)	0.037
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.76
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8965
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	11.9379
Burned Peak Flow Rate (cfs)	12.4043
24-Hr Clear Runoff Volume (ac-ft)	1.3515
24-Hr Clear Runoff Volume (cu-ft)	58873.5132



Peak Flow Hydrologic Analysis

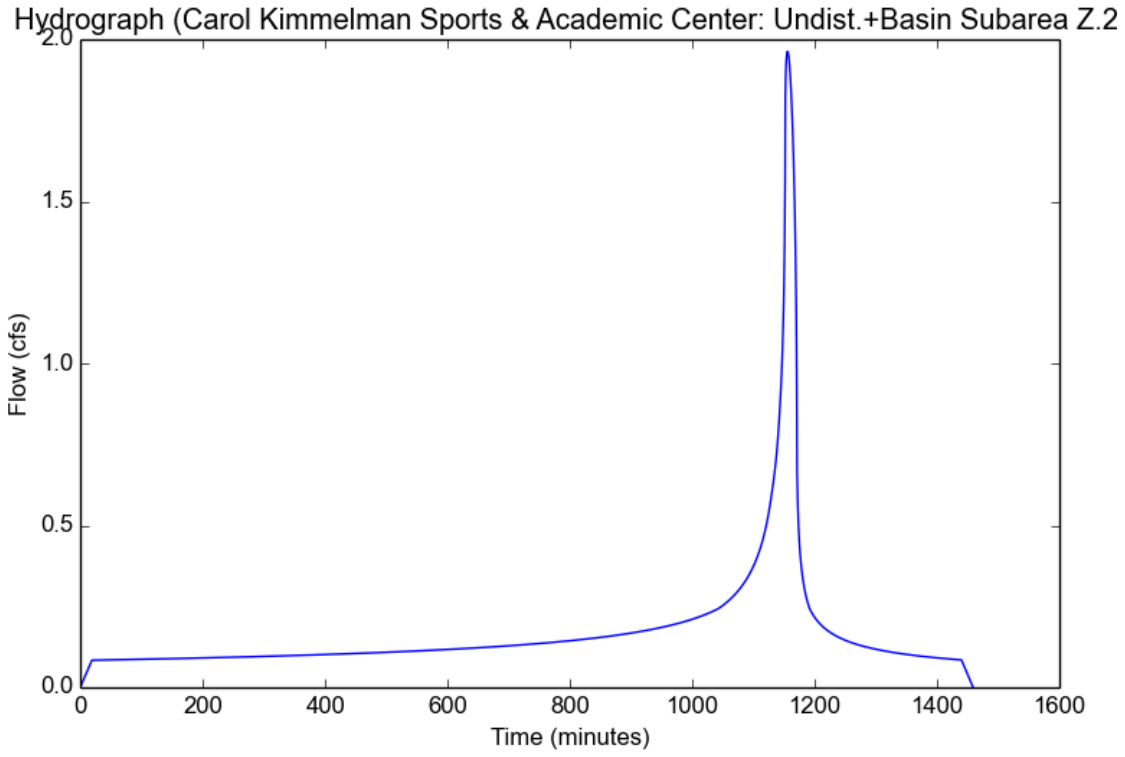
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Undisturbed
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Undist.+Basin Subarea Z.2
Area (ac)	1.2
Flow Path Length (ft)	1838.0
Flow Path Slope (vft/hft)	0.004
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.51
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	1.9751
Undeveloped Runoff Coefficient (Cu)	0.7534
Developed Runoff Coefficient (Cd)	0.8282
Time of Concentration (min)	19.0
Clear Peak Flow Rate (cfs)	1.9629
Burned Peak Flow Rate (cfs)	2.0874
24-Hr Clear Runoff Volume (ac-ft)	0.3427
24-Hr Clear Runoff Volume (cu-ft)	14929.8142



Peak Flow Hydrologic Analysis

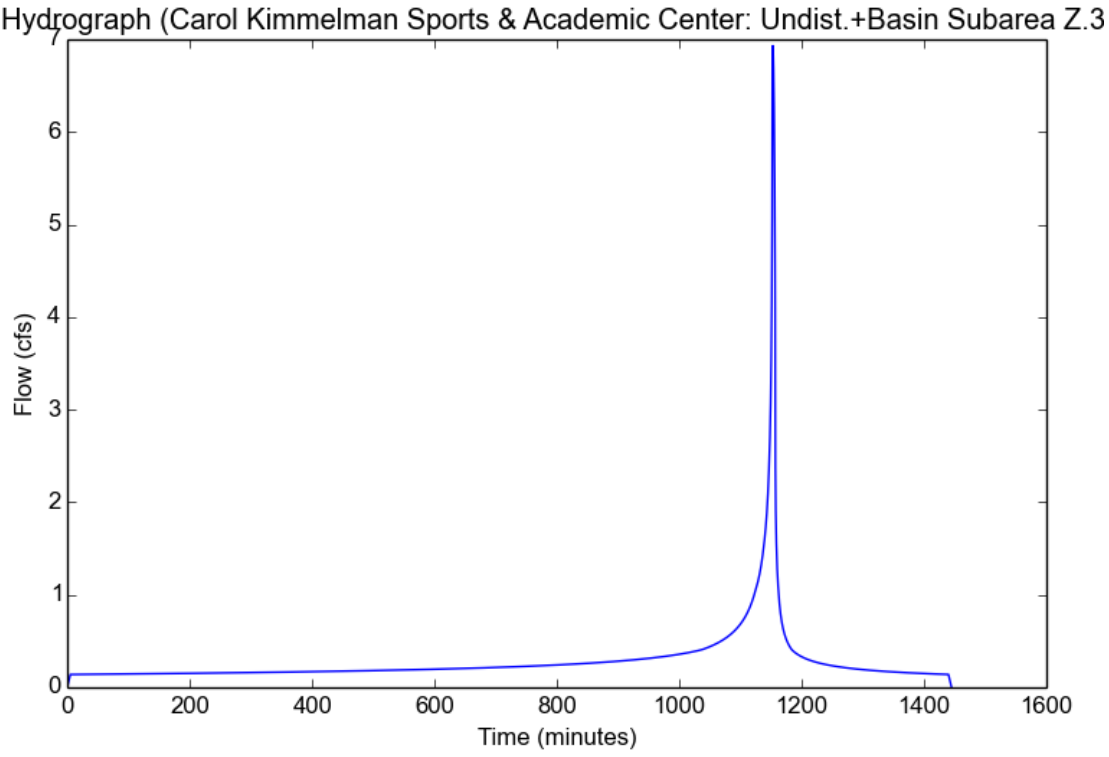
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Undisturbed
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Undist.+Basin Subarea Z.3
Area (ac)	2.1
Flow Path Length (ft)	295.0
Flow Path Slope (vft/hft)	0.027
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.48
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.6991
Undeveloped Runoff Coefficient (Cu)	0.8852
Developed Runoff Coefficient (Cd)	0.8923
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	6.9316
Burned Peak Flow Rate (cfs)	7.2146
24-Hr Clear Runoff Volume (ac-ft)	0.5784
24-Hr Clear Runoff Volume (cu-ft)	25193.9637



Peak Flow Hydrologic Analysis

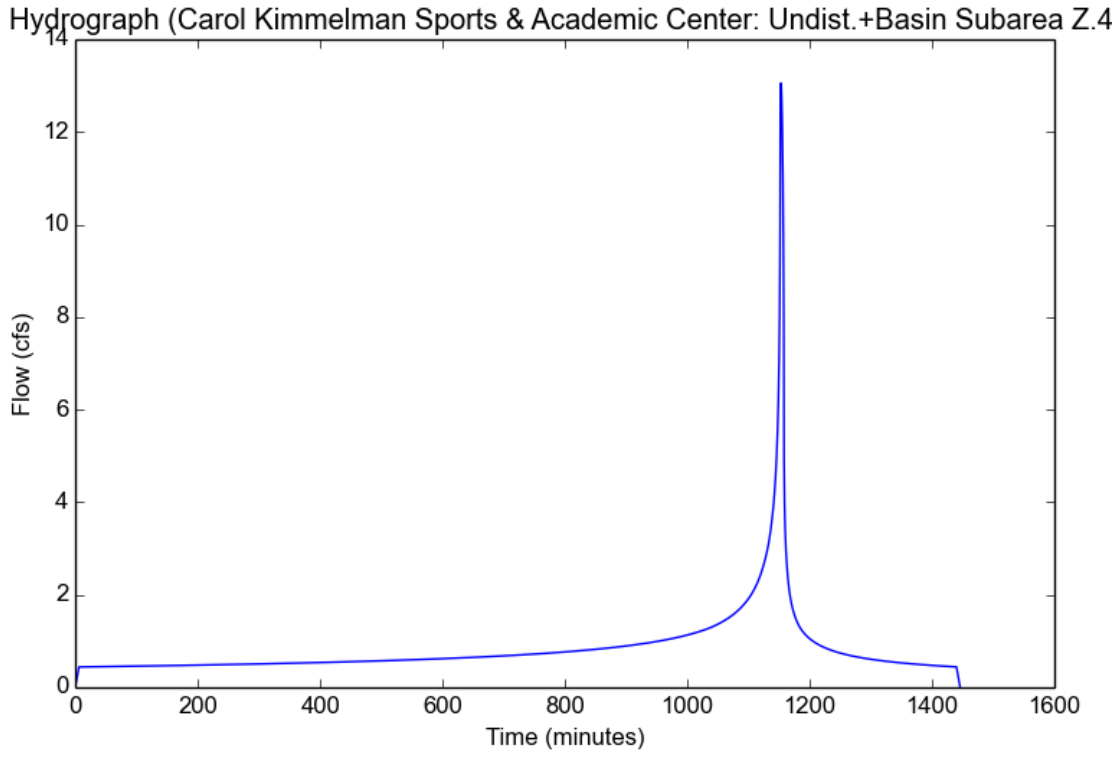
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Undisturbed
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Undist.+Basin Subarea Z.4
Area (ac)	4.3
Flow Path Length (ft)	497.0
Flow Path Slope (vft/hft)	0.012
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.81
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	3.3953
Undeveloped Runoff Coefficient (Cu)	0.8697
Developed Runoff Coefficient (Cd)	0.8942
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	13.0557
Burned Peak Flow Rate (cfs)	13.5714
24-Hr Clear Runoff Volume (ac-ft)	1.6911
24-Hr Clear Runoff Volume (cu-ft)	73664.0683



Peak Flow Hydrologic Analysis

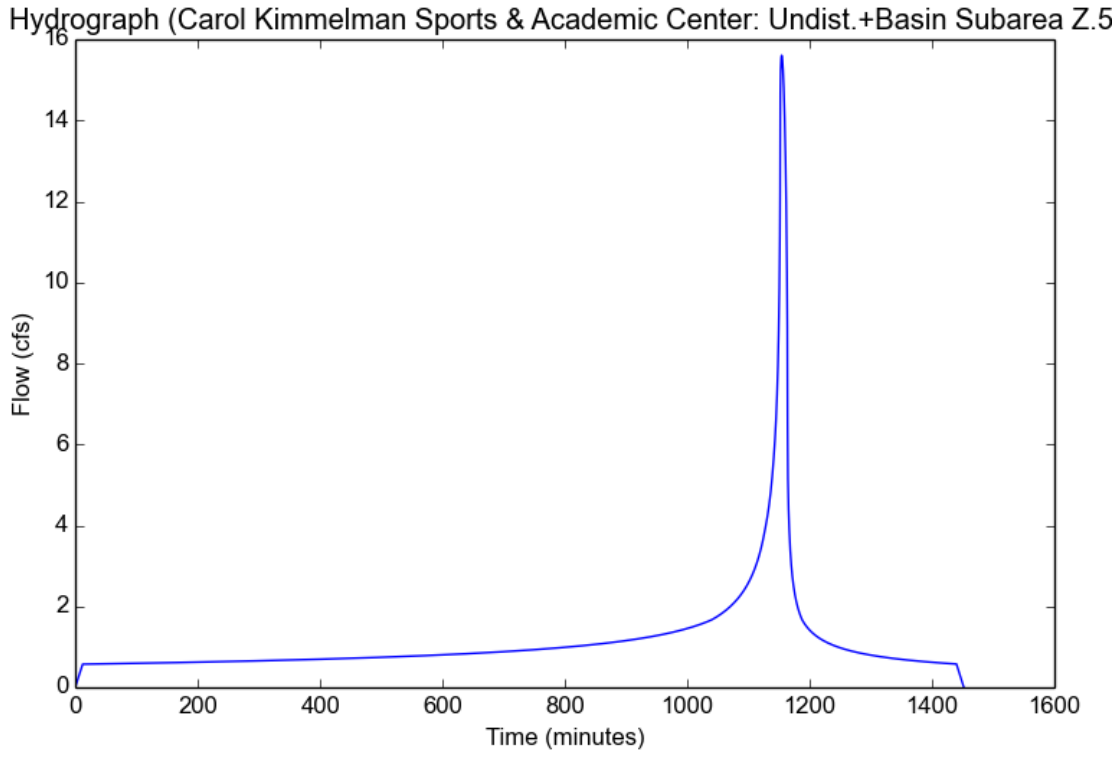
File location: //langan.com/data/IRV/data4/700060401/Project Data/_Discipline/Site Civil/Reports/Hydrology/Calculations/HydroCalc Exports/Undisturbed
Version: HydroCalc 1.0.3

Input Parameters

Project Name	Carol Kimmelman Sports & Academic Center
Subarea ID	Undist.+Basin Subarea Z.5
Area (ac)	7.4
Flow Path Length (ft)	1304.0
Flow Path Slope (vft/hft)	0.017
50-yr Rainfall Depth (in)	6.2
Percent Impervious	0.58
Soil Type	16
Design Storm Frequency	50-yr
Fire Factor	coastal
LID	False

Output Results

Modeled (50-yr) Rainfall Depth (in)	6.2
Peak Intensity (in/hr)	2.4513
Undeveloped Runoff Coefficient (Cu)	0.8055
Developed Runoff Coefficient (Cd)	0.8603
Time of Concentration (min)	12.0
Clear Peak Flow Rate (cfs)	15.606
Burned Peak Flow Rate (cfs)	16.4097
24-Hr Clear Runoff Volume (ac-ft)	2.3008
24-Hr Clear Runoff Volume (cu-ft)	100224.4776



APPENDIX J

Noise Analysis and Discussion

NOISE ANALYSIS DISCUSSION
USING CITY OF CARSON STANDARDS

Noise Analysis Using City of Carson Standards

Carson General Plan and Municipal Code

The City of Carson General Plan Noise Element adopts the ONC Noise Compatibility Matrix as their guidelines for exterior noise exposure limits for each land use category within the City. Table NOI-APP-1 below illustrates these adopted exterior noise exposure guidelines.

Table NOI-APP-1
City of Carson Land Use Noise Compatibility Guidelines

Land Use Category	Community Noise Exposure			
	Ldn or CNEL, dB			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential-Low Density	50-60	60-65	65-75	75-85
Residential-Multiple Family	50-60	60-65	65-75	75-85
Transient Lodging-Motel, Hotels	50-65	65-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-65	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-70	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	70-75	75-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-67.5	67.5-75	75-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-75	75-85	NA

Source: Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.

NOTES: NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE
New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

NA: Not Applicable

Source: City of Carson General Plan Noise Element (2004)

Project-Related Traffic Noise Increases

The primary noise-related effect the proposed project could have off site is an increase in traffic, which is the main source of noise in most urban areas. Project-related traffic noise levels were examined along roadways evaluated by the project traffic engineer (Gibson Transportation Consulting , or GTC), where the project would principally contribute vehicle trips. Roadway trip volumes for roadway segments of concern were calculated by Dudek, based upon the data provided by GTC for intersection performance analysis (refer to Appendix J for the traffic impact assessment).

The City methodology for traffic assessment specifies the project traffic should be evaluated in comparison to traffic predicted to occur on area roadways for the "opening" date of the project (in this case Year 2020). The City also requires that the examination of cumulative project traffic include a background ambient growth rate. The traffic engineers followed this methodology in evaluating project-related roadway traffic volume increases.

Traffic noise is generally assessed using software provided by the Federal Highway Administration (FHWA), the current version of which is titled Transportation Noise Model 2.5 (TNM 2.5). For projects in California, the TNM model is run based upon information found in California Vehicle Noise Emission Levels (Caltrans 1987) and Technical Noise Supplement – A Technical Supplement to the Traffic Noise Analysis Protocol (Caltrans 1998). The worksheets in the traffic noise section of this Appendix are based on the FHWA TNM 2.5 model, but provide an easier to understand format than the full model input and output data sheets. Acoustical calculations using standard noise modeling equations adapted from the FHWA noise prediction model were performed for the following scenarios: *Year 2020 without Project, Year 2020 Plus Project, Cumulative Without Project, and Cumulative Plus Project*.

The modeling calculations take into account the posted vehicle speed, average daily traffic volumes for each scenario, and the estimated vehicle mix (i.e., automobiles, medium and heavy trucks). The model assumed "pavement" propagation conditions, or a hard site surface. Noise levels are generally indicated at the residential property line adjacent to each roadway, which varies from approximately 25 to 45 feet from the roadway centerline. Noise levels at greater distances from the roadway centerline would be lower due to attenuation provided by increased distance from the noise source. Generally, noise from heavily traveled roadways would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway. The noise model does not take into account the sound-attenuating effect of intervening structures, barriers, vegetation, or topography. Therefore, the noise levels predicted by the model are conservative with respect to potential exterior exposure levels at noise-sensitive uses located along these roadways.

Future increases in traffic noise, with and without the proposed project, are provided in Table NOI-APP-2, below. Based on the information in Table NOI-APP-2, proposed project-related traffic

noise increases would be well below the perceptible threshold of an increase of 3 dBA for all the evaluated roadways, compared to existing roadway noise levels. Therefore, the proposed project would have a **less-than-significant project-specific impact** on off-site roadway traffic noise levels, using the City methodology.

Again with respect to NOI-APP-2, the proposed project would increase the roadway noise level by less than 1 dBA in the cumulative scenario, compared to the noise levels from cumulative projects without the proposed project. Traffic noise levels would also increase less than 3 dBA CNEL on all of the examined roadway segments, when comparing existing traffic noise levels to those from traffic associated with cumulative projects plus the proposed project. This increase falls below a "noticeable" change of 3 dBA. Therefore, the proposed project would have a **less-than-significant impact** on cumulative off-site roadway traffic noise levels.

TABLE NOI-APP-2
Traffic Noise Modeling Results
City Methodology

Modeled Receiver	Existing (2018) Noise Level (dBA CNEL)	Existing (2018) Plus Project Noise Level (dBA CNEL)	Difference (dB)	Cumulative Traffic With Ambient Noise Level (dBA CNEL)	Cumulative Traffic With Ambient Plus Project Noise Level (dBA CNEL)	Difference (dB)	Significant ?
A – Del Amo west of Avalon	77.9	78.0	0.1	78.7	78.7	0	NO
B – Avalon north of Turmont	73.1	73.2	0.1	73.9	74.0	0.1	NO
C – Avalon north of Elsemere	73.3	73.5	0.2	73.9	74.1	0.2	NO
D – MLK west of Avalon	66.0	66.8	0.8	66.2	67.0	0.8	NO
E – University east of Wadley	80.6	80.7	0.1	80.8	80.8	0	NO
F – Avalon north of 184th	72.8	73.0	0.2	73.5	73.6	0.1	NO
G – Victoria west of Avalon	77.9	78.7	0.8	78.8	78.8	0	NO
H – Main north of Lifford	77.6	78.1	0.5	79.2	78.9	-0.3	NO
I – Main south of Del Amo	78.1	78.2	0.1	78.5	78.6	0.1	NO
J – Main south of MLK	77.9	78.2	0.3	78.4	78.6	0.2	NO
K – Albertoni west of Avalon	78.2	78.2	0	78.3	78.3	0	NO

FIELD DATA SHEETS
SOUND LEVEL MEASUREMENTS

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center — PROJECT #: 10951
SITE ID:
SITE ADDRESS: — OBSERVER(S): PETE VITAR
START DATE: 10/11/18 — END DATE: 10/11/18
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 63 F — HUMIDITY: 68 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM - P3 — TYPE 1 (2) — SERIAL # 1403T0041
CALIBRATOR: BSWA CA 114 — SERIAL # 480151
CALIBRATION CHECK — PRE-TEST: dBA SPL — POST-TEST: dBA SPL — WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
K 1	9:16	9:31	75.6	88.4	66		73		

COMMENTS: READING TAKEN ON SOUTH SIDE OF E. ALBERTONI ST, WEST OF VISTA DR; PRIMARY NOISE SOURCE: TRAFFIC ON E. ALBERTONI ST;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR (EOP): 19'
TRAFFIC COUNT DURATION: 15 MIN — SPEED: MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	172			
MED TRKS	6			
HVY TRKS	5			
BUSES	3			
MOTRCLS	0			

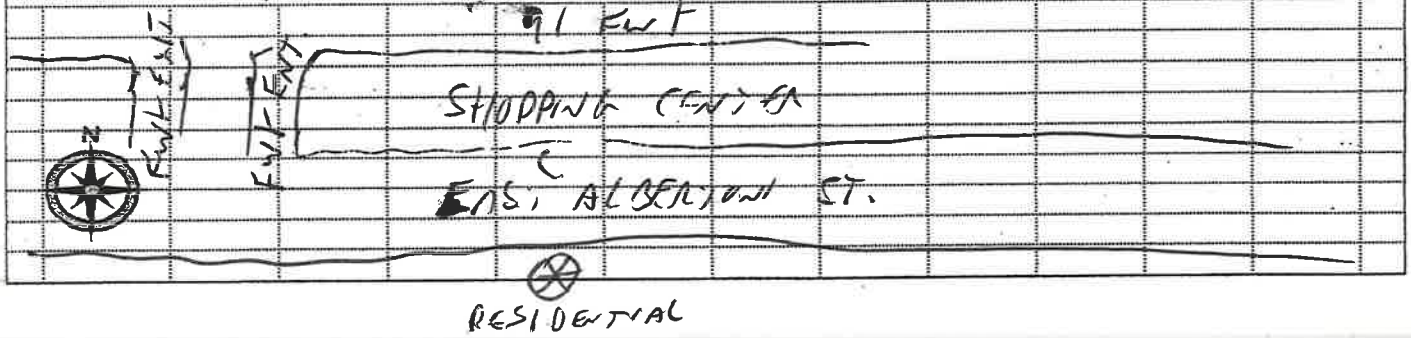
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: TRAFFIC ON 91 FWY;

DESCRIPTION / SKETCH
TERRAIN (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS: 2412; 2413; 2414; 2415
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS: | OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 67 F | HUMIDITY: 56 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR | OVRCAST | (PRTLY CLDY) | FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM - P3 | TYPE 1 (2) | SERIAL # 1403176004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST: dBA SPL | POST-TEST: dBA SPL | WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
G 2	9:51	10:01	78.9	87.8	57.2		73		

COMMENTS: READING TAKEN ON SOUTH SIDE OF E. VICTORIA ST, IN LINE WITH 408 VICTORIA (TO THE ~~WEST~~ OF METER); PRIMARY NOISE SOURCE: TRAFFIC ON E. VICTORIA ST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): 8'

TRAFFIC COUNT DURATION: ___ MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	198			
MED TRKS	14			
HVY TRKS	1			
BUSES	5			
MOTRCLS	1			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

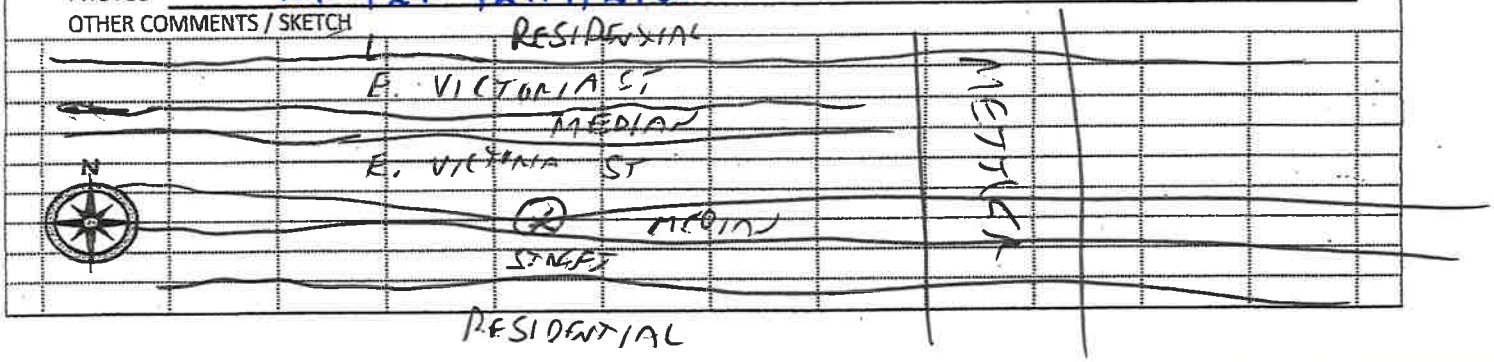
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
___ MIN				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT MIXED FLAT OTHER:
PHOTOS: 2417; 2418; 2419; 2420
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 67 F | HUMIDITY: 56 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR | OVRCAST (PRTLY CLDY) FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM - P3 | TYPE 1 (2) | SERIAL # 1403176004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST: dBA SPL | POST-TEST: dBA SPL | WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
F 3	10:16	10:31	72.2	85.7	54.2		65		

COMMENTS: READING TAKEN ON WEST SIDE OF AVALON BLVD, MID-BLOCK BETWEEN 183RD & 184TH STREETS (IN LINE WITH 18309 AVALON BL); PRIMARY NOISE SOURCE: TRAFFIC ON AVALON BLVD

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): 8'

TRAFFIC COUNT DURATION: ___ MIN | SPEED ___ MIN

COUNT 1 (OR RDWY 1)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	326			
MED TRKS	9			
HVY TRKS	1			
BUSES	10			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

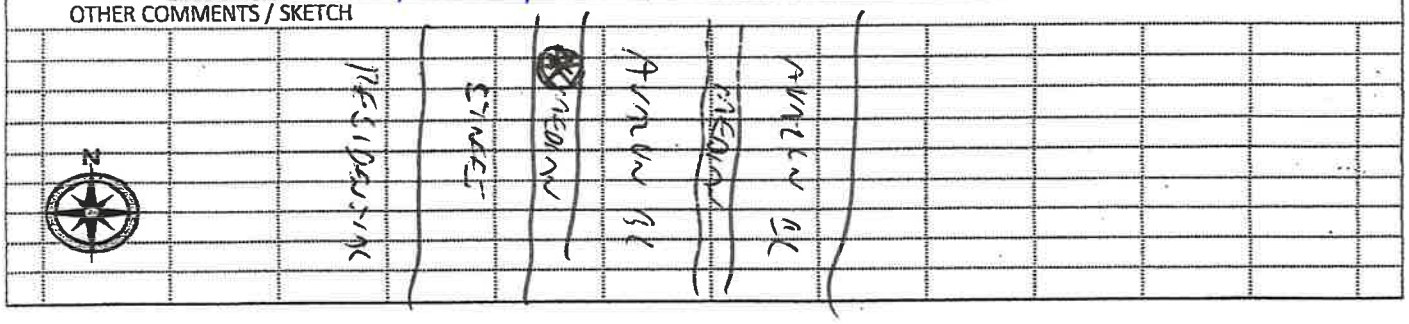
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES (DIST. BARKING DOGS) (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 2422; 2423; 2424; 2425
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 67 F | HUMIDITY: 56 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR | OVRCAST | (PRTLY CLDY) | FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM - P3 | TYPE 1 (2) | SERIAL # 1403176041
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST: dBA SPL | POST-TEST: dBA SPL | WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

	REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
H	4	11:06	11:21	79.4	90.8	61		75		

COMMENTS: READING TAKEN ON EAST SIDE OF MAIN ST, SOUTH OF INTERSECTION WITH GRIFFITH ST.; PRIMARY NOISE SOURCE: TRAFFIC ON MAIN ST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): AT E.O.P

TRAFFIC COUNT DURATION: ___ MIN SPEED ___ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	150			
MED TRKS	10			
HVY TRKS	2			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

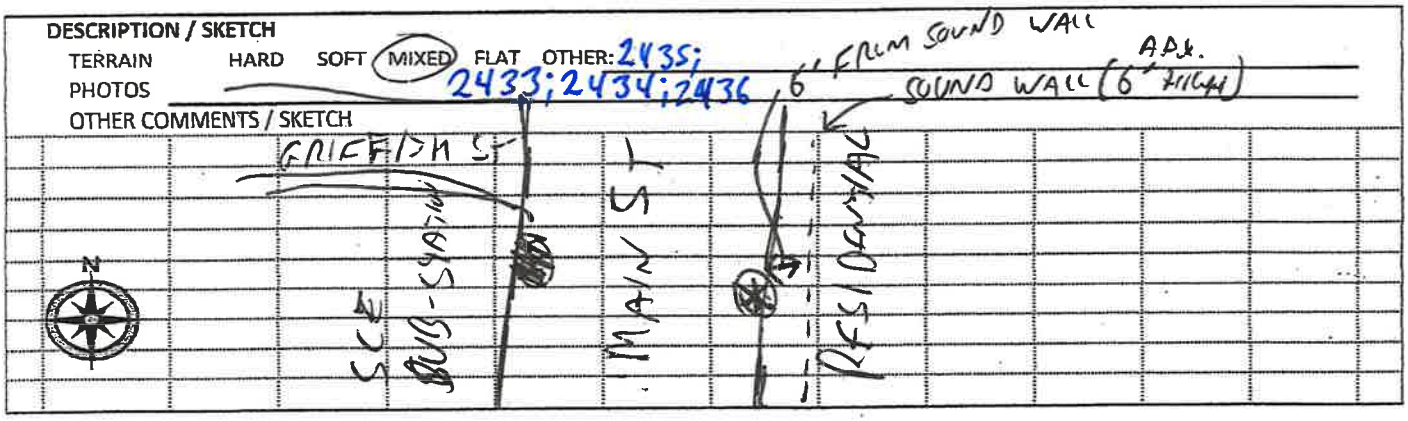
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: TRAFFIC ON 405 FWY; HELICOPTER HOVERING OVER 405 FWY BRIEFLY;

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER: 2435;
PHOTOS: 2433; 2434; 2436
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS: | OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 71 F | HUMIDITY: 44 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR | OVRCAST | (PRTLY CLDY) | FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM - P3 | TYPE 1 (2) | SERIAL # 1403176041
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST: dBA SPL | POST-TEST: dBA SPL | WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
J 5	11:38	11:53	77.2	91.2	65.1		73		

COMMENTS: READING TAKEN ON EAST SIDE OF MAIN ST. (ALONG GOODYEAR BLIMP PROPERTY) MID-WAY BETWEEN MLK JR ST AND 405 FWY; PRIMARY NOISE SOURCE: TRAFFIC ON MAIN ST; SECONDARY: TRAFFIC ON 405 FWY

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): 6'
TRAFFIC COUNT DURATION: ___ MIN | SPEED ___ MIN | SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	152			
MED TRKS	5			
HVY TRKS	9			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE: ✓

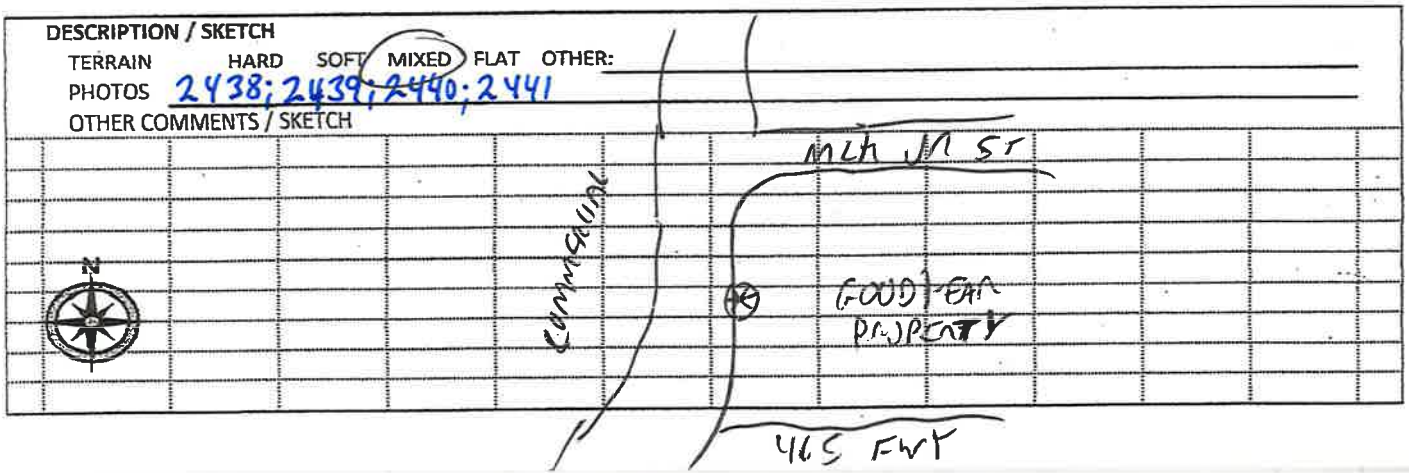
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: TRAFFIC ON 405 FWY

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 2438; 2439; 2440; 2441
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 71 F | HUMIDITY: 44 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S ~~SE~~ S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR | OVRCAST (PRTLY CLDY) FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM - P3 | TYPE 1 (2) | SERIAL # 1403176004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST: dBA SPL | POST-TEST: dBA SPL | WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
D 6	12:21	12:41	65.0	77.9	58.6		63		

COMMENTS: READING TAKEN AT VICTORIA PARK, NORTH OF MLK JR ST AND WEST OF PARK PARKING LOT; PRIMARY NOISE SOURCE: TRAFFIC ON MLK JR ST; SECONDARY: TRAFFIC ON 405 FWY

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): 66'
TRAFFIC COUNT DURATION: ___ MIN SPEED ___ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	109			
MED TRKS	3			
HVY TRKS	0			
BUSES	0			
MOTRCLS	1			

(IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓)

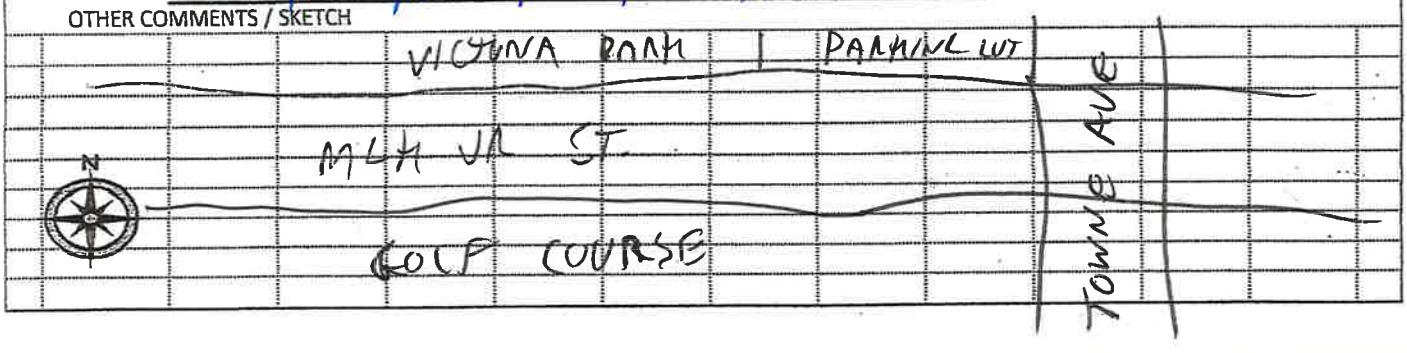
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS./YELLING) (DIST. TRAFFIC (LIST RDWYS BELOW)) (DIST. GARDENERS/LANDSCAPING NOISE)
OTHER: TRAFFIC ON 405 FWY

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 2443; 2444; 2445; 2446; 2447;
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 73 F | HUMIDITY: 40 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR | OVRCAST | (PRTLY CLDY) | FOG | RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM - P3 | TYPE 1 (2) | SERIAL # 1403170041
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST dBA SPL | POST-TEST dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
E 7	13:08	13:23	79.7	92.8	58.3		75		

COMMENTS
READING TAKEN ON ~~EUCALYPTUS~~ SOUTH SIDE OF E. UNIVERSITY DR BETWEEN WADLEIGH AVE AND PEPPERDINE DR ; PRIMARY NOISE SOURCE: TRAFFIC ON UNIVERSITY DR

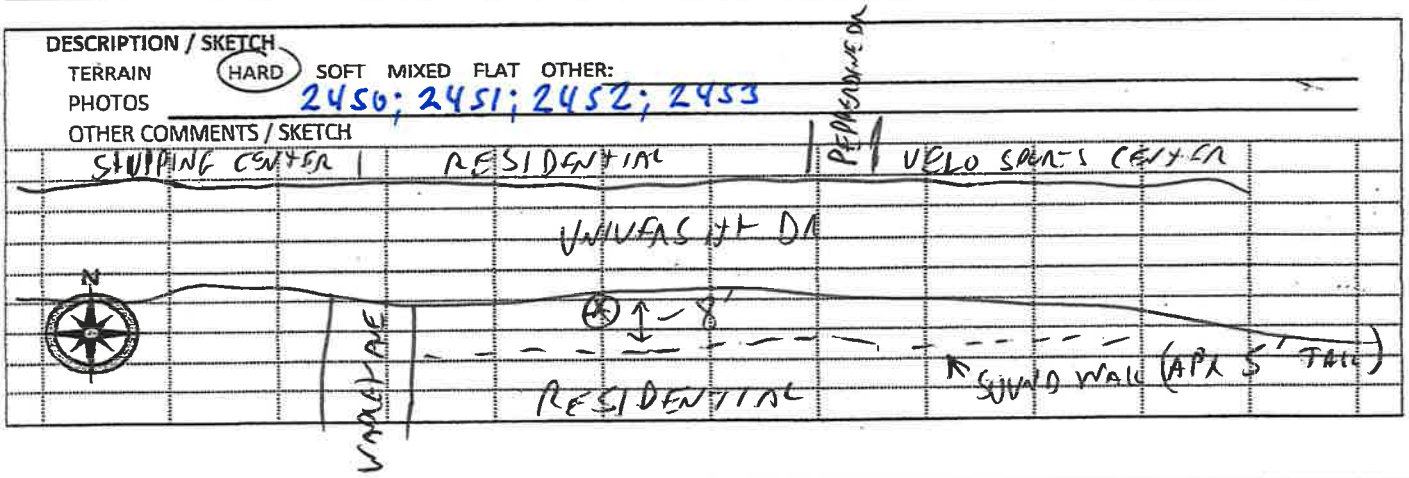
SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): AT EOP
TRAFFIC COUNT DURATION: ___ MIN SPEED ___ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	197								
MED TRKS	3								
HVY TRKS	1								
BUSES	1								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN: (HARD) SOFT MIXED FLAT OTHER:
PHOTOS: 2450; 2451; 2452; 2453
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center
PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/11/18 END DATE: 10/11/18
START TIME: END TIME:

METEOROLOGICAL CONDITIONS

TEMP 73 F HUMIDITY 40 % R.H. WIND (CALM) LIGHT MODERATE
WINDSPD ____ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM - P3 TYPE 1 (2) SERIAL # 140317004
CALIBRATOR: BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST ____ dBA SPL POST-TEST ____ dBA SPL WINDSCRN YES

SETTINGS A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
C 8	13:44	13:54	74.0	85.9	55.6		67		

COMMENTS
READING TAKEN ON WEST SIDE OF ~~[illegible]~~ AVALON BLVD, BETWEEN MLH UR ST & ELSMERE DR

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR (EOP): 10'
TRAFFIC COUNT DURATION: ____ MIN SPEED ____ MIN SPEED

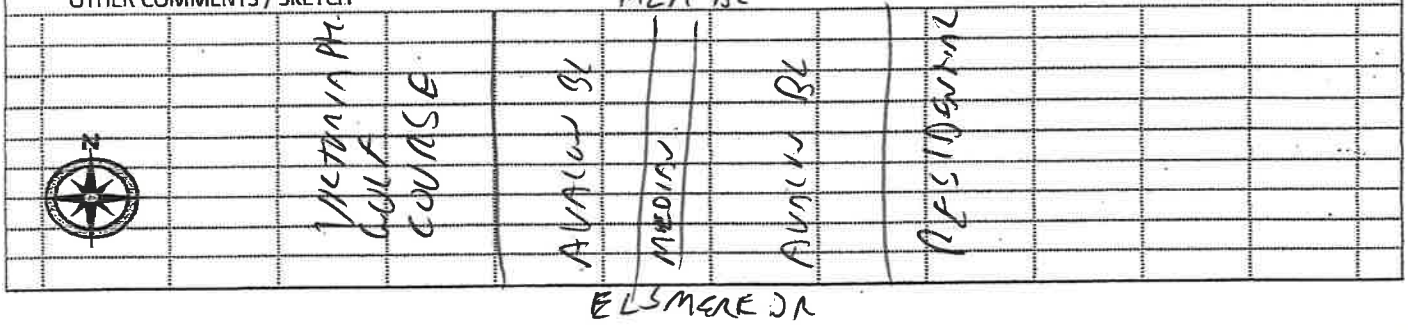
COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	309								
MED TRKS	6								
HVY TRKS	0								
BUSES	2								
MOTRCLS	1				✓				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS 2455; 2456; 2457; 2458
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center — PROJECT #: 10951
SITE ID:
SITE ADDRESS: — OBSERVER(S): PETE VITAR
START DATE: 10/11/18 — END DATE: 10/11/18
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 73 F — HUMIDITY: 40 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH — DIR. N NE S SE S SW W NW — VARIABLE STEADY GUSTY
SKY: SUNNY CLEAR — OVRCAST — (PRTLY CLDY) — FOG — RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM - P3 — TYPE 1 (2) — SERIAL # 1403176041
CALIBRATOR: BSWA CA 114 — SERIAL # 480151
CALIBRATION CHECK — PRE-TEST: dBA SPL — POST-TEST: dBA SPL — WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI — OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
B 9	14:12	14:22	74.1	85.7	55.9		69		

COMMENTS: READING TAKEN ON WEST SIDE OF AVALON BL, BETWEEN ELSMERE DR & E. TURMONT ST

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR (EOP): 10'
TRAFFIC COUNT DURATION: ___ MIN — SPEED ___ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	367			
MED TRKS	5			
HVY TRKS	2			
BUSES	5			
MOTRCLS	0			

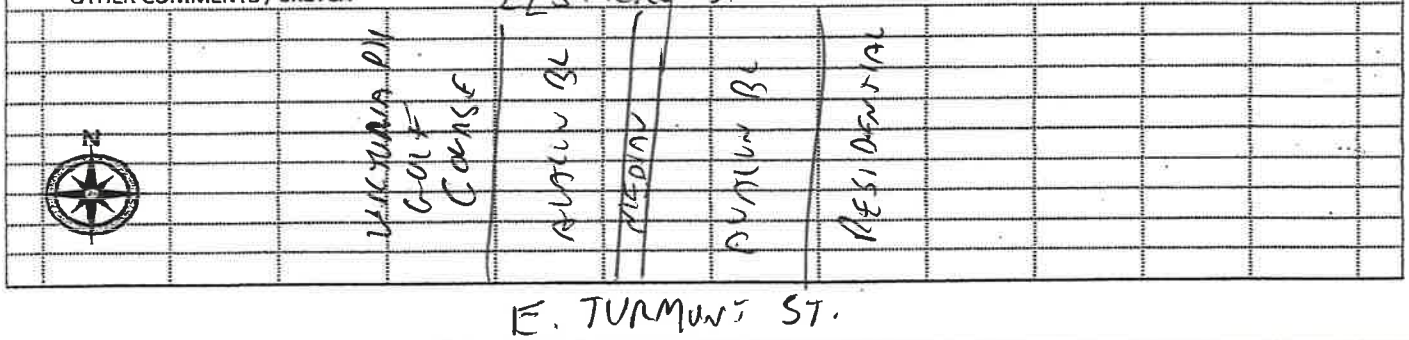
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 2460; 2461; 2462; 2463
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 73 F | HUMIDITY: 43 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: SUNNY (CLEAR) | OVRCAST PRTLY CLDY FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-P3 | TYPE 1 (2) | SERIAL # 1403T0041
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST dBA SPL | POST-TEST dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
A 10	14:54	15:04	78.7	93.3	67.5		75		

COMMENTS: READING TAKEN ON NORTH SIDE OF DEL MAR BLVD, BETWEEN AVALON BLVD & [illegible] CHANNEL

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: AS PHALT | DIST. TO RDWY C/L OR (EOP): 15'

TRAFFIC COUNT DURATION: ___ MIN | SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	321			
MED TRKS	2			
HVY TRKS	11			
BUSES	1			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

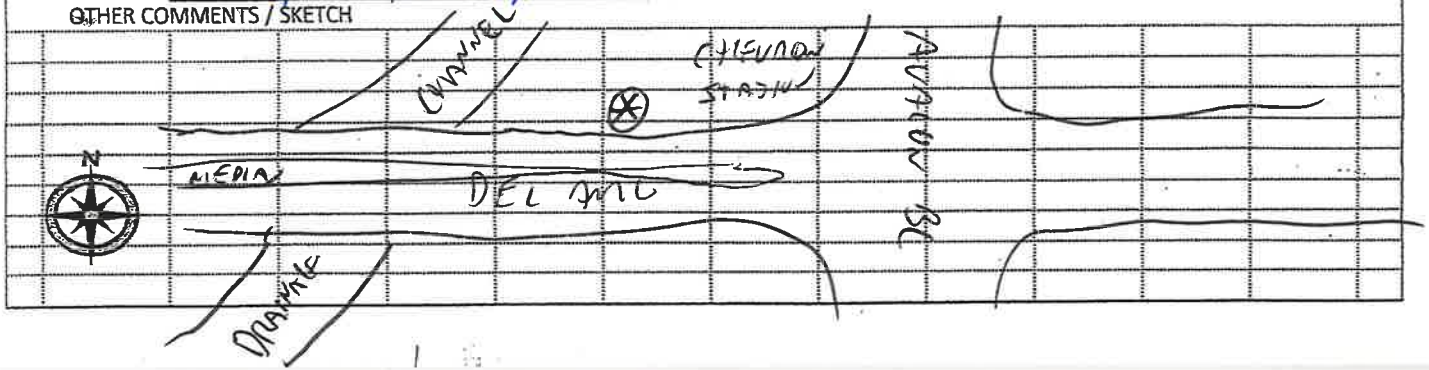
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
___ MIN				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 2465; 2466; 2467; 2468
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: Kimmelman Sports Center | PROJECT #: 10951
SITE ID:
SITE ADDRESS: | OBSERVER(S): PETE VITAR
START DATE: 10/11/18 | END DATE: 10/11/18
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS

TEMP 73 F | HUMIDITY 47 % R.H. | WIND: CALM (LIGHT) MODERATE
WINDSPD 13 MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY SUNNY (CLEAR) | OVRCAST PRTLY CLDY FOG | RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-P3 | TYPE 1 (2) | SERIAL # 1403176004
CALIBRATOR: BSWA CA 114 | SERIAL # 480151
CALIBRATION CHECK | PRE-TEST ____ dBA SPL | POST-TEST ____ dBA SPL | WINDSCRN YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI | OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
I 11	15:29	15:39	78.4	89.4	64.0		75		

COMMENTS: READING TAKEN ON EAST SIDE OF MAIN ST., ~~MAIN~~ SOUTH OF DEL AMO BLVD. AT ENTRANCE TO 20600 VISTA DEL LOMA (MIDDLE FORK PARK); PRIMARY NOISE SOURCE IS TRAFFIC ON MAIN ST.

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR (EOP): 9'

TRAFFIC COUNT DURATION: ____ MIN

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	281			
MED TRKS	6			
HVY TRKS	9			
BUSES	4			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

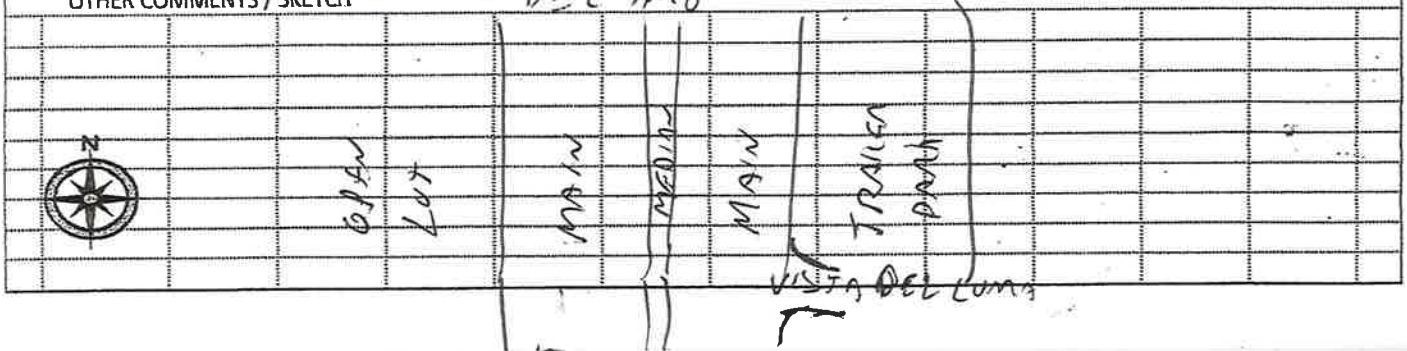
COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS 2470; 2471; 2472; 2473
OTHER COMMENTS / SKETCH



Monitor Name
Date

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT KIMMELMAN
PROJECT # 10951
SITE ID
SITE ADDRESS
OBSERVER(S) PETE VITAR
START DATE 1/17/19 END DATE 1/17/19
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 57 F HUMIDITY 93 % R.H. WIND CALM LIGHT MODERATE
WINDSPD MPH DIR. N NE E SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR OVRCAST (PRTLY CLDY) FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-P3 TYPE 1 (2) SERIAL # 14031.7004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST ____ dBA SPL POST-TEST ____ dBA SPL WINDSCRN YES

SETTINGS A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(C) 1	22:07	22:22	73.5	85.2	59.7		67		

COMMENTS
READING TAKEN ON WEST SIDE OF AVALON BLVD, BETWEEN MARTIN LUTHER KING JR STREET AND ELSMERE DR.; PRIMARY NOISE SOURCE IS TRAFFIC ON AVALON BL; SECONDARY IS TRAFFIC NOISE FROM 405 & 110 FREEWAYS

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR (EOP): 10'

TRAFFIC COUNT DURATION: 15 MIN SPEED ____ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ☑	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	153								
MED TRKS	0								
HVY TRKS	0								
BUSES	3								
MOTRCLS	0								

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: 405 & 110 FREEWAYS

DESCRIPTION / SKETCH
TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS 3553; 3554
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: KIMMELMAN
PROJECT #: 10951
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 1/17/19 END DATE: 1/17/19
START TIME: END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 57 F HUMIDITY: 93 % R.H.
WINDSPD: MPH DIR. N NE E SE S SW W NW
SKY: SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN
WIND: CALM LIGHT MODERATE VARIABLE STEADY GUSTY

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM-P3 TYPE 1 (2) SERIAL # 1403170004
CALIBRATOR: BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK: PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCRN YES
SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(B) (MW) 2	22:49	22:59	62.9	71.7	57.6		57		

COMMENTS: READING TAKEN ON WEST SIDE OF AVALON BLVD BETWEEN ELSMERE DR AND TURMONT STREET; PRIMARY NOISE SOURCE IS TRAFFIC ON AVALON BLVD.

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR (EOP): 10'
TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	104			
	MED TRKS	1			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 3555, 3556
OTHER COMMENTS / SKETCH



RCNM

INPUTS & MODELLING RESULTS

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Demo/Site prep/C&G

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
School/Park PL - 75'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	75	0
Dozer	No	40		81.7	75	0
Front End Loader	No	40		79.1	75	0
Backhoe	No	40		77.6	75	0
Tractor	No	40	84		75	0

Results

Equipment		Calculated (dBA) *Lmax	Leq
Dozer		78.1	74.2
Dozer		78.1	74.2
Front End Loader		75.6	71.6
Backhoe		74	70.1
Tractor		80.5	76.5
	Total	80.5	80.8

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence 215'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	215	0
Dozer	No	40		81.7	215	0
Front End Loader	No	40		79.1	215	0
Backhoe	No	40		77.6	215	0
Tractor	No	40	84		215	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Dozer		69	65
Dozer		69	65
Front End Loader		66.4	62.5
Backhoe		64.9	60.9
Tractor		71.3	67.4
	Total	71.3	71.7

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 440'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	440	0
Dozer	No	40		81.7	440	0
Front End Loader	No	40		79.1	440	0
Backhoe	No	40		77.6	440	0
Tractor	No	40	84		440	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Dozer		62.8	58.8
Dozer		62.8	58.8
Front End Loader		60.2	56.2
Backhoe		58.7	54.7
Tractor		65.1	61.1
	Total	65.1	65.5

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
School/Park PL - 75'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	75	0
Dozer	No	40		81.7	75	0
Scraper	No	40		83.6	75	0
Scraper	No	40		83.6	75	0
Tractor	No	40	84		75	0
Front End Loader	No	40		79.1	75	0

Results

Equipment		Calculated (dBA) *Lmax	Leq
Dozer		78.1	74.2
Dozer		78.1	74.2
Scraper		80.1	76.1
Scraper		80.1	76.1
Tractor		80.5	76.5
Front End Loader		75.6	71.6
	Total	80.5	82.8

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence 235'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	215	0
Dozer	No	40		81.7	215	0
Scraper	No	40		83.6	215	0
Scraper	No	40		83.6	215	0

Tractor	No	40	84		215	0
Front End Loader	No	40		79.1	215	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	69	65
Dozer	69	65
Scraper	70.9	66.9
Scraper	70.9	66.9
Tractor	71.3	67.4
Front End Loader	66.4	62.5
Total	71.3	73.7

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 440'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	440	0
Dozer	No	40		81.7	440	0
Scraper	No	40		83.6	440	0
Scraper	No	40		83.6	440	0
Tractor	No	40	84		440	0
Front End Loader	No	40		79.1	440	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Dozer	62.8	58.8
Dozer	62.8	58.8
Scraper	64.7	60.7
Scraper	64.7	60.7
Tractor	65.1	61.1
Front End Loader	60.2	56.2
Total	65.1	67.5

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Trenching

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
School/Park PL - 75'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	75	0
Excavator	No	40		80.7	75	0
Tractor	No	40	84		75	0
Front End Loader	No	40		79.1	75	0
Slurry Trenching Machine	No	50		80.4	75	0
Slurry Trenching Machine	No	50		80.4	75	0

Results

Equipment		Calculated (dBA) *Lmax	Leq
Excavator		77.2	73.2
Excavator		77.2	73.2
Tractor		80.5	76.5
Front End Loader		75.6	71.6
Slurry Trenching Machine		76.8	73.8
Slurry Trenching Machine		76.8	73.8
	Total	80.5	81.7

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence 215'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	215	0
Excavator	No	40		80.7	215	0
Tractor	No	40	84		215	0
Front End Loader	No	40		79.1	215	0

Slurry Trenching Machine		No	50	80.4	215	0
Slurry Trenching Machine		No	50	80.4	215	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Excavator		68	64.1
Excavator		68	64.1
Tractor		71.3	67.4
Front End Loader		66.4	62.5
Slurry Trenching Machine		67.7	64.7
Slurry Trenching Machine		67.7	64.7
	Total	71.3	72.6

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 440'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	440	0
Excavator	No	40		80.7	440	0
Tractor	No	40	84		440	0
Front End Loader	No	40		79.1	440	0
Slurry Trenching Machine	No	50		80.4	440	0
Slurry Trenching Machine	No	50		80.4	440	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Excavator		61.8	57.8
Excavator		61.8	57.8
Tractor		65.1	61.1
Front End Loader		60.2	56.2
Slurry Trenching Machine		61.5	58.5
Slurry Trenching Machine		61.5	58.5
	Total	65.1	66.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Building Construction

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
School/Park PL - 75'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	75	0
Man Lift	No	20		74.7	75	0
Man Lift	No	20		74.7	75	0
Generator	No	50		80.6	75	0
Tractor	No	40	84		75	0
Front End Loader	No	40		79.1	75	0
Backhoe	No	40		77.6	75	0
Welder / Torch	No	40		74	75	0
Man Lift	No	20		74.7	75	0
Man Lift	No	20		74.7	75	0

Results

		Calculated (dBA)	
Equipment		*Lmax	Leq
Man Lift		71.2	64.2
Man Lift		71.2	64.2
Man Lift		71.2	64.2
Generator		77.1	74.1
Tractor		80.5	76.5
Front End Loader		75.6	71.6
Backhoe		74	70.1
Welder / Torch		70.5	66.5
Man Lift		71.2	64.2
Man Lift		71.2	64.2
	Total	80.5	80.5

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residence 215'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	215	0
Man Lift	No	20		74.7	215	0
Man Lift	No	20		74.7	215	0
Generator	No	50		80.6	215	0
Tractor	No	40	84		215	0
Front End Loader	No	40		79.1	215	0
Backhoe	No	40		77.6	215	0
Welder / Torch	No	40		74	215	0
Man Lift	No	20		74.7	215	0
Man Lift	No	20		74.7	215	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Man Lift	62	55
Man Lift	62	55
Man Lift	62	55
Generator	68	65
Tractor	71.3	67.4
Front End Loader	66.4	62.5
Backhoe	64.9	60.9
Welder / Torch	61.3	57.4
Man Lift	62	55
Man Lift	62	55
Total	71.3	71.4

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 440'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	440	0
Man Lift	No	20		74.7	440	0
Man Lift	No	20		74.7	440	0
Generator	No	50		80.6	440	0
Tractor	No	40	84		440	0
Front End Loader	No	40		79.1	440	0

Backhoe	No	40	77.6	440	0
Welder / Torch	No	40	74	440	0
Man Lift	No	20	74.7	440	0
Man Lift	No	20	74.7	440	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Man Lift	55.8	48.8
Man Lift	55.8	48.8
Man Lift	55.8	48.8
Generator	61.7	58.7
Tractor	65.1	61.1
Front End Loader	60.2	56.2
Backhoe	58.7	54.7
Welder / Torch	55.1	51.1
Man Lift	55.8	48.8
Man Lift	55.8	48.8
Total	65.1	65.1

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
School/Park PL - 75'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	75	0
Compressor (air)	No	40		77.7	75	0

Results

Equipment	Calculated (dBA) *Lmax	Leq
Compressor (air)	74.1	70.2
Compressor (air)	74.1	70.2
Total	74.1	73.2

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence 215'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	215	0
Compressor (air)	No	40		77.7	215	0

Results

Equipment	Calculated (dBA) *Lmax	Leq
Compressor (air)	65	61
Compressor (air)	65	61
Total	65	64

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustical Center 440'	Residential	65	60	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	440	0
Compressor (air)	No	40		77.7	440	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Compressor (air)		58.8	54.8
Compressor (air)		58.8	54.8
	Total	58.8	57.8

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
School/Park PL - 75'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	75	0
Paver	No	50		77.2	75	0
All Other Equipment > 5 HP	No	50	85		75	0
All Other Equipment > 5 HP	No	50	85		75	0
Roller	No	20		80	75	0
Roller	No	20		80	75	0
Excavator	No	40		80.7	75	0
Excavator	No	40		80.7	75	0
Flat Bed Truck	No	40		74.3	75	0
Flat Bed Truck	No	40		74.3	75	0

Results

Equipment		Calculated (dBA) *Lmax	Leq
Paver		73.7	70.7
Paver		73.7	70.7
All Other Equipment > 5 HP		81.5	78.5
All Other Equipment > 5 HP		81.5	78.5
Roller		76.5	69.5
Roller		76.5	69.5
Excavator		77.2	73.2
Excavator		77.2	73.2
Flat Bed Truck		70.7	66.7
Flat Bed Truck		70.7	66.7
	Total	81.5	83.7

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence 215'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	215	0
Paver	No	50		77.2	215	0
All Other Equipment > 5 HP	No	50	85		215	0
All Other Equipment > 5 HP	No	50	85		215	0
Roller	No	20		80	215	0
Roller	No	20		80	215	0
Excavator	No	40		80.7	215	0
Excavator	No	40		80.7	215	0
Flat Bed Truck	No	40		74.3	215	0
Flat Bed Truck	No	40		74.3	215	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Paver		64.6	61.5
Paver		64.6	61.5
All Other Equipment > 5 HP		72.3	69.3
All Other Equipment > 5 HP		72.3	69.3
Roller		67.3	60.3
Roller		67.3	60.3
Excavator		68	64.1
Excavator		68	64.1
Flat Bed Truck		61.6	57.6
Flat Bed Truck		61.6	57.6
	Total	72.3	74.5

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Acoustical Center 440'	Residential	65	60	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	440	0
Paver	No	50		77.2	440	0
All Other Equipment > 5 HP	No	50	85		440	0
All Other Equipment > 5 HP	No	50	85		440	0
Roller	No	20		80	440	0
Roller	No	20		80	440	0

Excavator	No	40	80.7	440	0
Excavator	No	40	80.7	440	0
Flat Bed Truck	No	40	74.3	440	0
Flat Bed Truck	No	40	74.3	440	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	58.3	55.3
Paver	58.3	55.3
All Other Equipment > 5 HP	66.1	63.1
All Other Equipment > 5 HP	66.1	63.1
Roller	61.1	54.1
Roller	61.1	54.1
Excavator	61.8	57.8
Excavator	61.8	57.8
Flat Bed Truck	55.4	51.4
Flat Bed Truck	55.4	51.4
Total	66.1	68.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/25/2019
Case Description: Kimmelman_Pile_Driving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
North_School/Park PL - 100'	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Impact Pile Driver	Yes	20		101.3	100	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Impact Pile Driver		95.2	88.3
	Total	95.2	88.3

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park Lot Lights to East res 38	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Impact Pile Driver	Yes	20		101.3	380	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Impact Pile Driver		83.7	76.7
	Total	83.7	76.7

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence North 75	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Impact Pile Driver	Yes	20		101.3	750	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Impact Pile Driver		77.7	70.8
	Total	77.7	70.8

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustic Center -510'	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Impact Pile Driver	Yes	20		101.3	510	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Impact Pile Driver		81.1	74.1
	Total	81.1	74.1

*Calculated Lmax is the Loudest value.

MECHANICAL EQUIPMENT NOISE MODELLING SPREADSHEET

Kimmeman Center

MECHANICAL EQUIPMENT NOISE LEVEL

Receiver: Avalon Blvd Residences

Location-Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Leq (dBA)
#1 (5-ton)	51	5	22.0	1,390	22
#2 (5-ton)	51	5	22.0	1,565	21
#6 (7.5-ton)	50	5	22.0	960	25
#7 (5-ton)	48	5	22.0	915	23
#17 (5-ton)	48	5	22.0	260	34
#25 (7.5-ton)	50	5	22.0	520	30

Source Sound Level Data

Total LEQ: 36

		LwA Single Source	Number of Units	Total Sound Level at 50 feet (Leq dBA)	
#1	5 ton	80	2	51	Welcome Center
#2	5 ton	80	2	51	Learning Center
#6	7.5 ton	82	1	50	Player Development
#7	5 ton	80	1	48	Tourney Administration
#17	5 ton	80	1	48	Maintenance Building
#25	7.5 ton	82	1	50	Soccer Support Building

Kimmeman Center

MECHANICAL EQUIPMENT NOISE LEVEL

Receiver: Victoria Park / Towne Elementary Property Line

Location-Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Leq (dBA)
#1 (5-ton)	51	5	22.0	175	40
#2 (5-ton)	51	5	22.0	185	40
#6 (7.5-ton)	50	5	22.0	175	39
#7 (5-ton)	48	5	22.0	275	34
#17 (5-ton)	48	5	22.0	425	30
#25 (7.5-ton)	50	5	22.0	1,175	23

Source Sound Level Data

Total LEQ: 45

		LwA Single Source	Number of Units	Total Sound Level at 50 feet (Leq dBA)	
#1	5 ton	80	2	51	Welcome Center
#2	5 ton	80	2	51	Learning Center
#6	7.5 ton	82	1	50	Player Development
#7	5 ton	80	1	48	Tourney Administration
#17	5 ton	80	1	48	Maintenance Building
#25	7.5 ton	82	1	50	Soccer Support Building

Kimmeman Center

MECHANICAL EQUIPMENT NOISE LEVEL

Receiver: E 189th Street Residences

Location-Equipment	Leq (h) at 50' (dBA)	Receiver Elevation (feet)	Source Elevation (feet)	Source to Receiver (feet)	Leq (dBA)
#1 (5-ton)	51	5	22.0	915	26
#2 (5-ton)	51	5	22.0	1,000	25
#6 (7.5-ton)	50	5	22.0	785	26
#7 (5-ton)	48	5	22.0	935	23
#17 (5-ton)	48	5	22.0	1,285	20
#25 (7.5-ton)	50	5	22.0	1,890	19

Source Sound Level Data

Total LEQ: 32

		LwA Single Source	Number of Units	Total Sound Level at 50 feet (Leq dBA)	
#1	5 ton	80	2	51	Welcome Center
#2	5 ton	80	2	51	Learning Center
#6	7.5 ton	82	1	50	Player Development
#7	5 ton	80	1	48	Tourney Administration
#17	5 ton	80	1	48	Maintenance Building
#25	7.5 ton	82	1	50	Soccer Support Building

ROADWAY TRAFFIC NOISE MODELLING SPREADSHEETS

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	20,100			PK HR VOL	2,010
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.7	71.8	69.9	64.0	73.2
MEDIUM TRUCKS	65.1	63.7	57.3	54.3	63.8
HEAVY TRUCKS	75.9	74.6	65.6	65.4	74.6
VEHICULAR NOISE	**78.1**	76.6	71.5	67.9	77.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	24,090			PK HR VOL	2,409
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.5	72.5	70.7	64.7	74.0
MEDIUM TRUCKS	65.8	64.5	58.1	55.1	64.6
HEAVY TRUCKS	76.7	75.4	66.4	66.2	75.4
VEHICULAR NOISE	**78.9**	77.4	72.3	68.7	77.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Existing + Project**	BY:	J. Leech

ADT	24,290			PK HR VOL	2,429
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.5	72.6	70.8	64.8	74.0
MEDIUM TRUCKS	65.9	64.5	58.1	55.1	64.6
HEAVY TRUCKS	76.7	75.4	66.5	66.2	75.4
VEHICULAR NOISE	**79.0**	77.4	72.3	68.8	78.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative Traffic**	BY:	J. Leech

ADT	28,310			PK HR VOL	2,831
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.2	71.4	65.4	74.7
MEDIUM TRUCKS	66.5	65.2	58.8	55.8	65.3
HEAVY TRUCKS	77.4	76.1	67.1	66.9	76.1
VEHICULAR NOISE	**79.6**	78.1	73.0	69.4	78.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative Traffic Plus Project**	BY:	J. Leech

ADT	28,510			PK HR VOL	2,851
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.3	71.5	65.5	74.7
MEDIUM TRUCKS	66.6	65.2	58.8	55.8	65.3
HEAVY TRUCKS	77.4	76.1	67.1	66.9	76.1
VEHICULAR NOISE	**79.7**	78.1	73.0	69.5	78.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	28,400			PK HR VOL	2,840
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.3	71.4	65.5	74.7
MEDIUM TRUCKS	66.6	65.2	58.8	55.8	65.3
HEAVY TRUCKS	77.4	76.1	67.1	66.9	76.1
VEHICULAR NOISE	**79.6**	78.1	73.0	69.4	78.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**A** (Del Amo West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	28,600			PK HR VOL	2,860
SPEED	45				
PK HR %	10				
DIST CTL	42				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		18.6
DIST WALL	0		MED TRUCK SLE DIST		18.1
DIST W/OB	42		HVY TRUCK SLE DIST		18.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9500
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.3	71.5	65.5	74.7
MEDIUM TRUCKS	66.6	65.2	58.9	55.8	65.3
HEAVY TRUCKS	77.4	76.1	67.2	66.9	76.1
VEHICULAR NOISE	**79.7**	78.2	73.0	69.5	78.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	22,740			PK HR VOL	2,274
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	70.5	68.6	66.8	60.8	70.0
MEDIUM TRUCKS	66.5	65.2	58.8	55.8	65.2
HEAVY TRUCKS	66.6	65.3	56.3	56.1	65.3
VEHICULAR NOISE	**73.1**	71.4	67.8	63.0	72.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	27,710			PK HR VOL	2,771
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.4	69.5	67.7	61.7	70.9
MEDIUM TRUCKS	67.4	66.0	59.7	56.6	66.1
HEAVY TRUCKS	67.4	66.1	57.2	56.9	66.1
VEHICULAR NOISE	**73.9**	72.3	68.6	63.8	73.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	28,530			PK HR VOL	2,853
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.5	69.6	67.8	61.8	71.0
MEDIUM TRUCKS	67.5	66.1	59.8	56.7	66.2
HEAVY TRUCKS	67.5	66.3	57.3	57.1	66.3
VEHICULAR NOISE	**74.1**	72.4	68.8	64.0	73.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	33,320			PK HR VOL	3,332
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.2	70.3	68.5	62.5	71.7
MEDIUM TRUCKS	68.2	66.8	60.5	57.4	66.9
HEAVY TRUCKS	68.2	66.9	58.0	57.7	66.9
VEHICULAR NOISE	**74.7**	73.1	69.4	64.6	73.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	34,140			PK HR VOL	3,414
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.3	70.4	68.6	62.6	71.8
MEDIUM TRUCKS	68.3	66.9	60.6	57.5	67.0
HEAVY TRUCKS	68.3	67.0	58.1	57.8	67.0
VEHICULAR NOISE	**74.9**	73.2	69.5	64.8	74.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	33,590			PK HR VOL	3,359
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.2	70.3	68.5	62.5	71.7
MEDIUM TRUCKS	68.2	66.9	60.5	57.4	66.9
HEAVY TRUCKS	68.3	67.0	58.0	57.8	67.0
VEHICULAR NOISE	**74.8**	73.1	69.5	64.7	73.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**B** (Avalon north of Turmont)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	34,410			PK HR VOL	3,441
SPEED	45				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.3	70.4	68.6	62.6	71.8
MEDIUM TRUCKS	68.3	67.0	60.6	57.6	67.0
HEAVY TRUCKS	68.4	67.1	58.1	57.9	67.1
VEHICULAR NOISE	**74.9**	73.2	69.6	64.8	74.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	19,080			PK HR VOL	1,908
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	70.0	68.1	66.3	60.3	69.5
MEDIUM TRUCKS	66.0	64.6	58.3	55.2	64.7
HEAVY TRUCKS	65.9	64.6	55.7	55.5	64.7
VEHICULAR NOISE	**72.6**	70.9	67.3	62.5	71.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	27,620			PK HR VOL	2,762
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.7	69.7	67.9	61.9	71.1
MEDIUM TRUCKS	67.6	66.2	59.9	56.8	66.3
HEAVY TRUCKS	67.5	66.2	57.3	57.1	66.3
VEHICULAR NOISE	**74.2**	72.5	68.9	64.1	73.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	28,840			PK HR VOL	2,884
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.8	69.9	68.1	62.1	71.3
MEDIUM TRUCKS	67.8	66.4	60.1	57.0	66.5
HEAVY TRUCKS	67.7	66.4	57.5	57.3	66.4
VEHICULAR NOISE	**74.3**	72.7	69.1	64.3	73.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	31,080			PK HR VOL	3,108
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.2	70.2	68.4	62.4	71.7
MEDIUM TRUCKS	68.1	66.7	60.4	57.3	66.8
HEAVY TRUCKS	68.1	66.8	57.8	57.6	66.8
VEHICULAR NOISE	**74.7**	73.0	69.4	64.6	73.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	32,300			PK HR VOL	3,230
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.3	70.4	68.6	62.6	71.8
MEDIUM TRUCKS	68.3	66.9	60.5	57.5	67.0
HEAVY TRUCKS	68.2	66.9	58.0	57.7	66.9
VEHICULAR NOISE	**74.8**	73.2	69.5	64.7	74.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	31,640			PK HR VOL	3,164
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.2	70.3	68.5	62.5	71.7
MEDIUM TRUCKS	68.2	66.8	60.5	57.4	66.9
HEAVY TRUCKS	68.1	66.8	57.9	57.7	66.9
VEHICULAR NOISE	**74.8**	73.1	69.5	64.7	73.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**C** (Avalon north of Elsemere)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	32,860			PK HR VOL	3,286
SPEED	46				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.4	70.5	68.7	62.7	71.9
MEDIUM TRUCKS	68.4	67.0	60.6	57.6	67.1
HEAVY TRUCKS	68.3	67.0	58.1	57.8	67.0
VEHICULAR NOISE	**74.9**	73.3	69.6	64.8	74.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	3,390			PK HR VOL	339
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.0	60.1	58.3	52.3	61.5
MEDIUM TRUCKS	59.3	57.9	51.5	48.5	58.0
HEAVY TRUCKS	58.2	56.9	47.9	47.7	56.9
VEHICULAR NOISE	**64.9**	63.3	59.4	54.7	64.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	5,380			PK HR VOL	538
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	64.0	62.1	60.3	54.3	63.5
MEDIUM TRUCKS	61.3	59.9	53.5	50.5	60.0
HEAVY TRUCKS	60.2	58.9	49.9	49.7	58.9
VEHICULAR NOISE	**66.9**	65.3	61.4	56.8	66.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	6,420			PK HR VOL	642
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	64.8	62.8	61.0	55.1	64.3
MEDIUM TRUCKS	62.1	60.7	54.3	51.3	60.8
HEAVY TRUCKS	60.9	59.6	50.7	50.4	59.6
VEHICULAR NOISE	**67.7**	66.0	62.2	57.5	66.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	4,500			PK HR VOL	450
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.2	61.3	59.5	53.5	62.7
MEDIUM TRUCKS	60.5	59.1	52.8	49.7	59.2
HEAVY TRUCKS	59.4	58.1	49.1	48.9	58.1
VEHICULAR NOISE	**66.1**	64.5	60.7	56.0	65.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	5,540			PK HR VOL	554
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	64.1	62.2	60.4	54.4	63.6
MEDIUM TRUCKS	61.4	60.0	53.7	50.6	60.1
HEAVY TRUCKS	60.3	59.0	50.0	49.8	59.0
VEHICULAR NOISE	**67.0**	65.4	61.6	56.9	66.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	5,650			PK HR VOL	565
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	64.2	62.3	60.5	54.5	63.7
MEDIUM TRUCKS	61.5	60.1	53.8	50.7	60.2
HEAVY TRUCKS	60.4	59.1	50.1	49.9	59.1
VEHICULAR NOISE	**67.1**	65.5	61.6	57.0	66.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**D** (MLK west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	6,690			PK HR VOL	669
SPEED	44				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9600
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	65.0	63.0	61.2	55.2	64.4
MEDIUM TRUCKS	62.2	60.9	54.5	51.5	61.0
HEAVY TRUCKS	61.1	59.8	50.9	50.6	59.8
VEHICULAR NOISE	**67.8**	66.2	62.4	57.7	67.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	8,080			PK HR VOL	808
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:		Kimmelman			
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.5	73.6	71.8	65.8	75.0
MEDIUM TRUCKS	74.8	73.5	67.1	64.1	73.6
HEAVY TRUCKS	72.4	71.1	62.2	62.0	71.2
VEHICULAR NOISE	**79.2**	77.6	73.4	69.0	78.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	13,850			PK HR VOL	1,385
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	77.9	75.9	74.1	68.2	77.4
MEDIUM TRUCKS	77.2	75.8	69.4	66.4	75.9
HEAVY TRUCKS	74.8	73.5	64.5	64.3	73.5
VEHICULAR NOISE	**81.6**	80.0	75.7	71.3	80.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	13,980			PK HR VOL	1,398
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	77.9	76.0	74.2	68.2	77.4
MEDIUM TRUCKS	77.2	75.8	69.5	66.4	75.9
HEAVY TRUCKS	74.8	73.5	64.6	64.3	73.5
VEHICULAR NOISE	**81.6**	80.0	75.8	71.4	80.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	14,200			PK HR VOL	1,420
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	78.0	76.1	74.3	68.3	77.5
MEDIUM TRUCKS	77.3	75.9	69.5	66.5	76.0
HEAVY TRUCKS	74.9	73.6	64.6	64.4	73.6
VEHICULAR NOISE	**81.7**	80.1	75.9	71.4	80.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	14,330			PK HR VOL	1,433
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	78.0	76.1	74.3	68.3	77.5
MEDIUM TRUCKS	77.3	75.9	69.6	66.5	76.0
HEAVY TRUCKS	74.9	73.6	64.7	64.4	73.6
VEHICULAR NOISE	**81.7**	80.1	75.9	71.5	80.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	14,340			PK HR VOL	1,434
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	78.0	76.1	74.3	68.3	77.5
MEDIUM TRUCKS	77.3	76.0	69.6	66.5	76.0
HEAVY TRUCKS	74.9	73.6	64.7	64.4	73.6
VEHICULAR NOISE	**81.7**	80.1	75.9	71.5	80.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**E** (MLK University east of Wadley)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	14,470			PK HR VOL	1,447
SPEED	46				
PK HR %	10				
DIST CTL	19				
DIST N/F	36	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		7.9
DIST WALL	0		MED TRUCK SLE DIST		6.7
DIST W/OB	19		HVY TRUCK SLE DIST		6.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	78.1	76.1	74.3	68.3	77.6
MEDIUM TRUCKS	77.4	76.0	69.6	66.6	76.1
HEAVY TRUCKS	75.0	73.7	64.7	64.5	73.7
VEHICULAR NOISE	**81.8**	80.2	75.9	71.5	80.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman			JN:	10991
RECVR/ROAD:	**F** (Avalon north of 184th)			DATE:	12/6/2018
Scenario:	**Calibration**			BY:	J. Leech
ADT	13,840			PK HR VOL	1,384
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	68.0	66.1	64.3	58.3	67.5
MEDIUM TRUCKS	66.3	64.9	58.5	55.5	65.0
HEAVY TRUCKS	64.0	62.7	53.7	53.5	62.7
VEHICULAR NOISE	**71.1**	69.5	65.6	61.0	70.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**F** (Avalon north of 184th)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	25,160			PK HR VOL	2,516
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	70.6	68.7	66.9	60.9	70.1
MEDIUM TRUCKS	68.8	67.5	61.1	58.1	67.6
HEAVY TRUCKS	66.6	65.3	56.3	56.1	65.3
VEHICULAR NOISE	**73.7**	72.1	68.2	63.6	72.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	F (Avalon north of 184th)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	26,360			PK HR VOL	2,636
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	70.8	68.9	67.1	61.1	70.3
MEDIUM TRUCKS	69.0	67.7	61.3	58.3	67.8
HEAVY TRUCKS	66.8	65.5	56.5	56.3	65.5
VEHICULAR NOISE	**73.9**	72.3	68.4	63.8	73.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**F** (Avalon north of 184th)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	28,510			PK HR VOL	2,851
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.1	69.2	67.4	61.4	70.6
MEDIUM TRUCKS	69.4	68.0	61.7	58.6	68.1
HEAVY TRUCKS	67.1	65.8	56.9	56.6	65.8
VEHICULAR NOISE	**74.3**	72.7	68.7	64.1	73.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	F (Avalon north of 184th)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	29,710			PK HR VOL	2,971
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.3	69.4	67.6	61.6	70.8
MEDIUM TRUCKS	69.6	68.2	61.8	58.8	68.3
HEAVY TRUCKS	67.3	66.0	57.1	56.8	66.0
VEHICULAR NOISE	**74.5**	72.8	68.9	64.3	73.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**F** (Avalon north of 184th)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	28,920			PK HR VOL	2,892
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.2	69.3	67.5	61.5	70.7
MEDIUM TRUCKS	69.5	68.1	61.7	58.7	68.2
HEAVY TRUCKS	67.2	65.9	56.9	56.7	65.9
VEHICULAR NOISE	**74.3**	72.7	68.8	64.2	73.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**F** (Avalon north of 184th)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	30,160			PK HR VOL	3,016
SPEED	46				
PK HR %	10				
DIST CTL	52				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		35.8
DIST WALL	0		MED TRUCK SLE DIST		35.6
DIST W/OB	52		HVY TRUCK SLE DIST		35.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9400
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.4	69.5	67.6	61.7	70.9
MEDIUM TRUCKS	69.6	68.3	61.9	58.9	68.3
HEAVY TRUCKS	67.4	66.1	57.1	56.9	66.1
VEHICULAR NOISE	**74.5**	72.9	69.0	64.3	73.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	13,680			PK HR VOL	1,368
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.1	72.2	70.4	64.4	73.6
MEDIUM TRUCKS	75.7	74.3	67.9	64.9	74.4
HEAVY TRUCKS	67.6	66.3	57.3	57.1	66.3
VEHICULAR NOISE	**78.4**	76.8	72.5	68.0	77.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	15,430			PK HR VOL	1,543
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.7	72.7	70.9	64.9	74.2
MEDIUM TRUCKS	76.2	74.8	68.4	65.4	74.9
HEAVY TRUCKS	68.1	66.8	57.8	57.6	66.8
VEHICULAR NOISE	**78.9**	77.3	73.0	68.6	77.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	18,350			PK HR VOL	1,835
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.4	73.5	71.7	65.7	74.9
MEDIUM TRUCKS	76.9	75.6	69.2	66.2	75.7
HEAVY TRUCKS	68.8	67.5	58.6	58.4	67.5
VEHICULAR NOISE	**79.6**	78.1	73.8	69.3	78.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	15,660			PK HR VOL	1,566
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.7	72.8	71.0	65.0	74.2
MEDIUM TRUCKS	76.2	74.9	68.5	65.5	75.0
HEAVY TRUCKS	68.1	66.8	57.9	57.7	66.9
VEHICULAR NOISE	**78.9**	77.4	73.1	68.6	78.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	18,580			PK HR VOL	1,858
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.5	73.5	71.7	65.8	75.0
MEDIUM TRUCKS	77.0	75.6	69.3	66.2	75.7
HEAVY TRUCKS	68.9	67.6	58.6	58.4	67.6
VEHICULAR NOISE	**79.7**	78.1	73.8	69.4	78.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	18,810			PK HR VOL	1,881
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.5	73.6	71.8	65.8	75.0
MEDIUM TRUCKS	77.0	75.7	69.3	66.3	75.8
HEAVY TRUCKS	68.9	67.6	58.7	58.5	67.7
VEHICULAR NOISE	**79.7**	78.2	73.9	69.4	78.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**G** (Victoria West of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	19,040			PK HR VOL	1,904
SPEED	46				
PK HR %	10				
DIST CTL	40				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.5
DIST WALL	0		MED TRUCK SLE DIST		12.8
DIST W/OB	40		HVY TRUCK SLE DIST		12.8
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0950
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.6	73.7	71.8	65.9	75.1
MEDIUM TRUCKS	77.1	75.7	69.4	66.3	75.8
HEAVY TRUCKS	69.0	67.7	58.8	58.5	67.7
VEHICULAR NOISE	**79.8**	78.2	73.9	69.5	78.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	6,480			PK HR VOL	648
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	71.8	69.8	68.0	62.0	71.2
MEDIUM TRUCKS	72.6	71.2	64.9	61.8	71.3
HEAVY TRUCKS	64.7	63.4	54.4	54.2	63.4
VEHICULAR NOISE	**75.6**	74.0	69.9	65.3	74.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman			JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)			DATE:	12/6/2018
Scenario:	**Existing**			BY:	J. Leech
ADT	12,890			PK HR VOL	1,289
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.7	72.8	71.0	65.0	74.2
MEDIUM TRUCKS	75.6	74.2	67.9	64.8	74.3
HEAVY TRUCKS	67.7	66.4	57.4	57.2	66.4
VEHICULAR NOISE	**78.6**	77.0	72.9	68.3	77.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	14,270			PK HR VOL	1,427
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.3	71.5	65.5	74.7
MEDIUM TRUCKS	76.1	74.7	68.3	65.3	74.8
HEAVY TRUCKS	68.1	66.8	57.9	57.6	66.8
VEHICULAR NOISE	**79.0**	77.4	73.3	68.7	78.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman			JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)			DATE:	12/6/2018
Scenario:	**Cumulative**			BY:	J. Leech
ADT	17,340			PK HR VOL	1,734
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	76.0	74.1	72.3	66.3	75.5
MEDIUM TRUCKS	76.9	75.5	69.2	66.1	75.6
HEAVY TRUCKS	68.9	67.6	58.7	58.5	67.7
VEHICULAR NOISE	**79.9**	78.3	74.1	69.6	78.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	18,720			PK HR VOL	1,872
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	76.4	74.4	72.6	66.6	75.8
MEDIUM TRUCKS	77.2	75.9	69.5	66.5	75.9
HEAVY TRUCKS	69.3	68.0	59.0	58.8	68.0
VEHICULAR NOISE	**80.2**	78.6	74.5	69.9	79.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	17,470			PK HR VOL	1,747
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	76.1	74.1	72.3	66.3	75.5
MEDIUM TRUCKS	76.9	75.6	69.2	66.2	75.6
HEAVY TRUCKS	69.0	67.7	58.7	58.5	67.7
VEHICULAR NOISE	**79.9**	78.3	74.2	69.6	78.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**H** (Main north of Lifford)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	18,850			PK HR VOL	1,885
SPEED	50				
PK HR %	10				
DIST CTL	29				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		13.8
DIST WALL	0		MED TRUCK SLE DIST		13.1
DIST W/OB	29		HVY TRUCK SLE DIST		13.2
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9000
MEDIUM TRUCKS	0.874	0.051	0.075	0.0850
HEAVY TRUCKS	0.891	0.028	0.081	0.0050

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	76.4	74.5	72.7	66.7	75.9
MEDIUM TRUCKS	77.3	75.9	69.5	66.5	76.0
HEAVY TRUCKS	69.3	68.0	59.1	58.8	68.0
VEHICULAR NOISE	**80.2**	78.6	74.5	69.9	79.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman			JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)			DATE:	12/6/2018
Scenario:	**Calibration**			BY:	J. Leech
ADT	15,000			PK HR VOL	1,500
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	72.6	70.7	68.9	62.9	72.1
MEDIUM TRUCKS	70.2	68.8	62.4	59.4	68.9
HEAVY TRUCKS	75.0	73.7	64.7	64.5	73.7
VEHICULAR NOISE	**77.8**	76.3	71.0	67.5	76.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman			JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)			DATE:	12/6/2018
Scenario:	**Existing**			BY:	J. Leech
ADT	20,490			PK HR VOL	2,049
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.0	72.0	70.2	64.3	73.5
MEDIUM TRUCKS	71.5	70.2	63.8	60.8	70.3
HEAVY TRUCKS	76.3	75.0	66.1	65.8	75.0
VEHICULAR NOISE	**79.1**	77.6	72.3	68.9	78.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	20,840			PK HR VOL	2,084
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.0	72.1	70.3	64.3	73.5
MEDIUM TRUCKS	71.6	70.2	63.9	60.8	70.3
HEAVY TRUCKS	76.4	75.1	66.2	65.9	75.1
VEHICULAR NOISE	**79.2**	77.7	72.4	68.9	78.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	22,320			PK HR VOL	2,232
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.3	72.4	70.6	64.6	73.8
MEDIUM TRUCKS	71.9	70.5	64.2	61.1	70.6
HEAVY TRUCKS	76.7	75.4	66.5	66.2	75.4
VEHICULAR NOISE	**79.5**	78.0	72.7	69.2	78.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman			JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)			DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**			BY:	J. Leech
ADT	22,670			PK HR VOL	2,267
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.4	72.5	70.7	64.7	73.9
MEDIUM TRUCKS	72.0	70.6	64.2	61.2	70.7
HEAVY TRUCKS	76.8	75.5	66.5	66.3	75.5
VEHICULAR NOISE	**79.6**	78.1	72.7	69.3	78.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	22,520			PK HR VOL	2,252
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.4	72.5	70.6	64.7	73.9
MEDIUM TRUCKS	71.9	70.6	64.2	61.2	70.7
HEAVY TRUCKS	76.7	75.4	66.5	66.3	75.4
VEHICULAR NOISE	**79.6**	78.1	72.7	69.3	78.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	I (Main south of Del Amo)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	22,870			PK HR VOL	2,287
SPEED	45				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9200
MEDIUM TRUCKS	0.874	0.051	0.075	0.0400
HEAVY TRUCKS	0.891	0.028	0.081	0.0400

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.4	72.5	70.7	64.7	73.9
MEDIUM TRUCKS	72.0	70.6	64.3	61.2	70.7
HEAVY TRUCKS	76.8	75.5	66.6	66.3	75.5
VEHICULAR NOISE	**79.6**	78.1	72.8	69.3	78.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	6,640			PK HR VOL	664
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	69.6	67.6	65.8	59.8	69.0
MEDIUM TRUCKS	65.8	64.5	58.1	55.1	64.6
HEAVY TRUCKS	73.5	72.2	63.2	63.0	72.2
VEHICULAR NOISE	**75.4**	74.0	68.2	65.1	74.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	15,040			PK HR VOL	1,504
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.1	71.2	69.4	63.4	72.6
MEDIUM TRUCKS	69.4	68.0	61.7	58.6	68.1
HEAVY TRUCKS	77.0	75.7	66.8	66.5	75.7
VEHICULAR NOISE	**79.0**	77.5	71.7	68.7	77.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	15,920			PK HR VOL	1,592
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.4	71.4	69.6	63.6	72.8
MEDIUM TRUCKS	69.6	68.3	61.9	58.9	68.4
HEAVY TRUCKS	77.3	76.0	67.0	66.8	76.0
VEHICULAR NOISE	**79.2**	77.8	72.0	68.9	78.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	16,400			PK HR VOL	1,640
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.5	71.6	69.8	63.8	73.0
MEDIUM TRUCKS	69.8	68.4	62.0	59.0	68.5
HEAVY TRUCKS	77.4	76.1	67.2	66.9	76.1
VEHICULAR NOISE	**79.4**	77.9	72.1	69.1	78.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	17,280			PK HR VOL	1,728
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.7	71.8	70.0	64.0	73.2
MEDIUM TRUCKS	70.0	68.6	62.3	59.2	68.7
HEAVY TRUCKS	77.6	76.3	67.4	67.1	76.3
VEHICULAR NOISE	**79.6**	78.1	72.3	69.3	78.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	16,630			PK HR VOL	1,663
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.5	71.6	69.8	63.8	73.0
MEDIUM TRUCKS	69.8	68.5	62.1	59.1	68.5
HEAVY TRUCKS	77.4	76.2	67.2	67.0	76.2
VEHICULAR NOISE	**79.4**	78.0	72.2	69.1	78.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	J (Main south of MLK)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	17,430			PK HR VOL	1,743
SPEED	47				
PK HR %	10				
DIST CTL	31				
DIST N/F	52	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		17.6
DIST WALL	0		MED TRUCK SLE DIST		17.1
DIST W/OB	31		HVY TRUCK SLE DIST		17.1
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9100
MEDIUM TRUCKS	0.874	0.051	0.075	0.0300
HEAVY TRUCKS	0.891	0.028	0.081	0.0600

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	73.8	71.8	70.0	64.0	73.2
MEDIUM TRUCKS	70.0	68.7	62.3	59.3	68.8
HEAVY TRUCKS	77.7	76.4	67.4	67.2	76.4
VEHICULAR NOISE	**79.6**	78.2	72.4	69.3	78.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Calibration**	BY:	J. Leech

ADT	7,440			PK HR VOL	744
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	70.4	68.5	66.7	60.7	69.9
MEDIUM TRUCKS	68.9	67.5	61.2	58.1	67.6
HEAVY TRUCKS	69.6	68.3	59.4	59.1	68.3
VEHICULAR NOISE	**74.5**	72.9	68.4	64.2	73.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Existing**	BY:	J. Leech

ADT	21,870			PK HR VOL	2,187
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.1	73.2	71.4	65.4	74.6
MEDIUM TRUCKS	73.6	72.2	65.9	62.8	72.3
HEAVY TRUCKS	74.3	73.0	64.1	63.8	73.0
VEHICULAR NOISE	**79.2**	77.6	73.0	68.9	78.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Existing Plus Project**	BY:	J. Leech

ADT	21,870			PK HR VOL	2,187
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.1	73.2	71.4	65.4	74.6
MEDIUM TRUCKS	73.6	72.2	65.9	62.8	72.3
HEAVY TRUCKS	74.3	73.0	64.1	63.8	73.0
VEHICULAR NOISE	**79.2**	77.6	73.0	68.9	78.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative**	BY:	J. Leech

ADT	20,910			PK HR VOL	2,091
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.9	73.0	71.2	65.2	74.4
MEDIUM TRUCKS	73.4	72.0	65.7	62.6	72.1
HEAVY TRUCKS	74.1	72.8	63.9	63.6	72.8
VEHICULAR NOISE	**79.0**	77.4	72.9	68.7	78.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative Plus Project**	BY:	J. Leech

ADT	20,910			PK HR VOL	2,091
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	74.9	73.0	71.2	65.2	74.4
MEDIUM TRUCKS	73.4	72.0	65.7	62.6	72.1
HEAVY TRUCKS	74.1	72.8	63.9	63.6	72.8
VEHICULAR NOISE	**79.0**	77.4	72.9	68.7	78.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth (City Methodology)**	BY:	J. Leech

ADT	22,190			PK HR VOL	2,219
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.3	71.4	65.5	74.7
MEDIUM TRUCKS	73.7	72.3	65.9	62.9	72.4
HEAVY TRUCKS	74.4	73.1	64.1	63.9	73.1
VEHICULAR NOISE	**79.2**	77.7	73.1	69.0	78.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Kimmelman	JN:	10991
RECVR/ROAD:	**K** (Albertoni west of Avalon)	DATE:	12/6/2018
Scenario:	**Cumulative With Ambient Growth w/Project (City Methodology)**	BY:	J. Leech

ADT	22,190			PK HR VOL	2,219
SPEED	46				
PK HR %	10				
DIST CTL	41				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		16.2
DIST WALL	0		MED TRUCK SLE DIST		15.6
DIST W/OB	41		HVY TRUCK SLE DIST		15.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

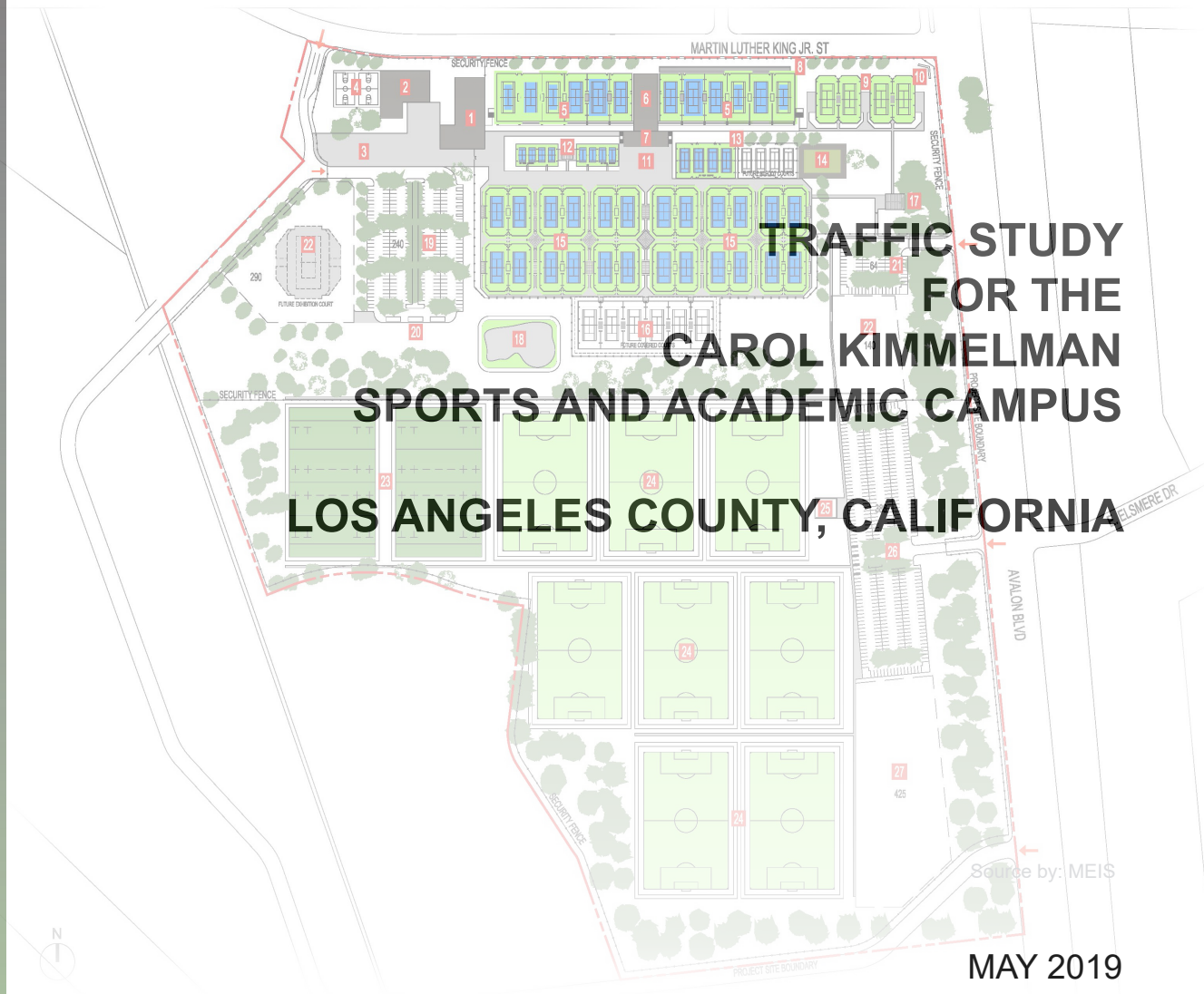
	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9300
MEDIUM TRUCKS	0.874	0.051	0.075	0.0500
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	75.2	73.3	71.4	65.5	74.7
MEDIUM TRUCKS	73.7	72.3	65.9	62.9	72.4
HEAVY TRUCKS	74.4	73.1	64.1	63.9	73.1
VEHICULAR NOISE	**79.2**	77.7	73.1	69.0	78.3

APPENDIX K

Traffic Impact Analysis



TRAFFIC STUDY FOR THE CAROL KIMMELMAN SPORTS AND ACADEMIC CAMPUS

LOS ANGELES COUNTY, CALIFORNIA

MAY 2019

PREPARED FOR

CAROL KIMMELMAN CENTER, LLC

PREPARED BY

Gibson transportation consulting, inc.

TRAFFIC STUDY
FOR THE
CAROL KIMMELMAN
SPORTS AND ACADEMIC CAMPUS

LOS ANGELES COUNTY, CALIFORNIA

May 2019

Prepared for:

CAROL KIMMELMAN CENTER, LLC

Prepared by:

GIBSON TRANSPORTATION CONSULTING, INC.
555 W. 5th Street, Suite 3375
Los Angeles, California 90013
(213) 683-0088

Ref: J1631

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Chapter 1
Introduction

This study presents the traffic impact analysis for the proposed Carol Kimmelman Sports and Academic Campus (Project). The methodology and base assumptions used in the analysis were established in conjunction with the County Department of Public Works (LACDPW).

PROJECT DESCRIPTION

The Project involves the redevelopment of a portion of the existing Links at Victoria Golf Course (VGC) with new recreation programs that would offer sports and academic enrichment services to underprivileged youth in the greater Los Angeles area and recreation programs for the public. The Project site, owned by the County of Los Angeles (County), is located at 340 Martin Luther King, Jr. Street and is bounded by Martin Luther King, Jr. Street to the north, Avalon Boulevard to the east, and the remaining portion of the VGC to the south and west. A separate development, The Creek at Dominguez Hills (The Creek), is proposed for the remaining portion of the VGC.

Specifically, the Project site occupies approximately 87 acres of the existing VGC and the Project includes three basic areas: the Learning Center, the Tennis Center, the Soccer Center, and other recreational uses as described further below:

- The Learning Center will be located at the northwest portion of the Project site on approximately one acre. The Tiger Woods Foundation has been identified as the operator. A new approximately 25,000 square foot (sf) building will house the Learning Center activities, which include daytime learning programs for elementary school students along with after-school programs for middle school through high school students. Programs will typically operate Monday through Friday, from approximately 8:30 AM to 2:00 PM during the school year for elementary school students and approximately 3:00 PM to 6:00 PM for middle to high school students. Periodic

programming and/or community events may occur from 7:00 PM to 10:00 PM on weeknights and from 10:00 AM to 5:00 PM on Saturdays.

- The Tennis Center will be located along the northern portion of the Project site on approximately 28 acres adjacent to the Learning Center. The United States Tennis Association Foundation (USTAF) has been identified as the operator. A new approximately 23,000 sf building will host a Welcome Center, along with another new building(s) providing 13,000 sf for player development activities and 5,000 sf for administrative offices. A Competition Venue will provide 12 hard tennis courts with seating for approximately 1,200 spectators. Up to 50 tennis courts of varying sizes and surfaces will also be provided for Tennis Center activities for a total of up to 62 courts plus an exhibition court[1]. Smaller ancillary buildings will be constructed for maintenance and storage activities and restrooms. The typical operational hours of the Tennis Center will be approximately 7:30 AM to 9:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends. It is anticipated that the Tennis Center will occasionally host tennis tournaments and special events throughout the year.

- The Soccer Center will be located on approximately 58 acres in the southern portion of the Project site. Two multi-sport fields and eight full-size soccer fields are proposed as part of the Soccer Center, which will operate approximately 8:00 AM to 11:00 PM daily. The fields will be utilized by local schools and community users on weekdays and by youth/adult league, club, and tournament play on weekday evenings and weekends. Approximately 10,000 sf of support building(s) is also proposed adjacent to the fields to house maintenance, storage, and an administrative office. While not proposed as part of regular operation, occasional special events may be hosted at the Soccer Center.

- Additional recreational areas provided for community use throughout the site may include:

    - Exercise areas
    - Skatepark/skateboarding facilities

[1] The exhibition court is proposed as a single tennis court that will provide up to 1,200 seats (separate from the Competition Venue); use of the exhibition court is not anticipated to be a part of the regular operation (it is reserved for special event use).

- Walking/running trails
- Other passive recreational areas

A total of 1,547 surface automobile parking spaces will be provided on-site, through a combination of 692 marked parking stalls located in three parking lots and approximately 855 spaces located in three overflow parking areas. A total of 240 marked stalls and 290 overflow parking stalls are located toward the northwest corner of the Project site and accessible from Martin Luther King, Jr. Street[2]. The 64 spaces located toward the northeast corner of the site are designated for employees only on a daily basis. A total of 388 marked stalls are centrally located on Avalon Boulevard and accessed through the Elsmere Drive driveway. Another 140 and 425 overflow spaces are located north and south of the main Avalon Boulevard parking lot, respectively.

Primary site access will be provided by new driveways on Martin Luther King, Jr. Street at the northwest boundary of the site and on Elsmere Drive at Avalon Boulevard. Both driveways will provide full access (i.e., left turns in and out), with the Elsmere Drive driveway operating with a traffic signal. A limited secondary access will be provided by a new right-turn-only driveway on Avalon Boulevard, immediately south of Martin Luther King, Jr. Street, into the employee parking lot. Both the driveway and parking lot will be restricted to employees only during typical daily operation.

On days with special events, the employee driveway will allow access into the site and into an overflow parking area for event visitors. Additional special event access will be provided by a new signalized driveway on Avalon Boulevard. Access to the overflow parking lots through both the employee parking lot and the new driveway is facilitated by internal drive aisles that will allow internal circulation between the multiple parking lots. Special event day site access will be managed through the development of an Event Management Plan to assist the operation of traffic.

The Project is anticipated to be complete by 2020. The conceptual Project site plan is shown in Figure 1.

[2] The 290 overflow spaces identified here are located within the footprint of the proposed tennis exhibition court. When the exhibition court is constructed, the removal of the 290 overflow spaces will result in a reduced parking supply of 1,257 spaces.

PROJECT LOCATION AND TRANSPORTATION ANALYSIS STUDY AREA

As described above, the Project is located on a portion of the existing VGC, which is a County-owned property. Most nearby land uses are primarily recreational, with Victoria Park located immediately to the north and residential and commercial uses to the east and south.

The Project site is located approximately 0.3 miles northeast of the San Diego Freeway (I-405), approximately 0.75 miles east of the Harbor Freeway (I-110), and approximately 1.3 miles south of the Gardena Freeway (SR 91). These freeways provide regional access to and from Los Angeles and Orange County.

As shown in Figure 2, the transportation analysis Study Area includes a geographic area generally bounded by Vermont Avenue, SR 91, Central Avenue, and 223rd Street. Detailed transportation analyses were conducted at key intersections within the Study Area.

TRAFFIC ANALYSIS METHODOLOGY

Study Scope and Analysis Conditions

The scope of analysis for this study was developed in consultation with the County. The base assumptions and technical methodologies (i.e., trip generation, study locations, analysis methodology, etc.) were identified as part of the study approach and were outlined in a Memorandum of Understanding (MOU), which was submitted to the LA for review. A copy of the MOU is provided in Appendix A.

This study analyzed the potential Project-generated traffic impacts on the street system in the vicinity of the Project site as compared to existing conditions at the time the Project's Notice of Preparation (NOP) was issued (July 2018) and projected future conditions at the time the Project is expected to be completed (Year 2020). Potential intersection impacts were evaluated for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods. The Saturday midday (12:00 PM to 2:00 PM) peak period was also analyzed to represent typical weekend conditions. A total of 31 intersections in the vicinity of the Project site were selected for

the detailed weekday traffic analysis, including 29 existing intersections[3], one intersection to be constructed with the Project and one proposed by The Creek). The Saturday analysis focused on 17 intersections[4] selected from the weekday analysis based on location and access to the Project site. The study intersections, along with their analyzed period, are noted in Table 1 and their locations are illustrated in Figure 2.

This traffic study evaluated the potential for impacts caused by the Project on the street and highway systems surrounding the Project site. The Project site is a County-owned facility and is subject to the guidelines utilized by the County. As such, LACDPW requested that the transportation study follow the criteria contained in its *Draft Traffic Impact Analysis Report Guidelines* (2013) (County TIA Guidelines). The following traffic conditions were developed and analyzed as part of this study:

- Existing Conditions (Year 2018) – The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions. The Existing Conditions analysis includes a description of key area streets and highways, traffic volumes and current operating conditions, and transit service in the Study Area. For the purposes of this analysis, the Existing Conditions in this traffic study represent conditions as of the issuance of the Project's NOP. Intersection turning movement counts were collected in February, May, August, and September 2018. Fieldwork (lane configurations and signal phasing) for the analyzed intersections was also collected in September 2018. Intersection lane configurations are provided in Appendix B, traffic count worksheets in Appendix C, and LOS worksheets in Appendix D.

- Existing with Project Conditions (Year 2018) – This analysis condition projects the potential intersection operating conditions that could be expected if the Project were built under existing conditions. This analysis evaluates the potential Project-related traffic impacts as compared to existing conditions. Mitigations, if necessary, will be identified to mitigate Project caused impacts.

- Future with Project Conditions (Year 2020) – This analysis projects the potential intersection operating conditions that could be expected with the addition of cumulative background traffic to the Existing with Project Conditions. This analysis identifies the potential incremental impacts of cumulative development, which includes both the Project at full buildout, prior to mitigation, and the addition of projected cumulative growth in the study area. Mitigations, if necessary, will be identified to mitigate the cumulative impacts of development.

[3] Of the 29 existing intersections, 27 are signalized and two are stop sign controlled.

[4] The 17 intersections selected for Saturday analysis include 15 existing signalized intersections, one new intersection to be constructed with the Project, and one new intersection proposed by a related project.

Intersection Analysis Methodology

A detailed intersection capacity analysis was conducted for the weekday morning and afternoon peak hours for each of these intersections under the three scenarios identified above. Peak period turning movement counts were conducted at the 29 study intersections in February, May, August, and September 2018 during the weekday morning and afternoon peak periods.

Level of service (LOS) is a qualitative measure used to describe the condition of traffic flow on the street system, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the minimum acceptable LOS in urban areas. LOS definitions are provided in Table 2.

Intersection capacity calculations were conducted to measure the LOS of the intersections using an overall intersection capacity of 1,600 vehicles per hour per lane and adding a factor of 0.10 to account for the yellow interval clearance. The existing or projected volumes through an intersection are compared to the capacity of the intersection to calculate a volume-to-capacity (V/C) ratio used to determine the LOS at the intersection.

In accordance with County guidelines, the LOS analyses for signalized intersections were conducted using the Intersection Capacity Utilization (ICU) methodology from *Highway Capacity Manual, Special Report 209* (Transportation Research Board, 2000) to obtain the V/C ratio for signalized intersections. Traffix software was used to calculate the ICU value for signalized intersections. Vistro software was used to implement the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodology to identify the amount of delay for the stop-controlled intersections. As requested by the County, the stop-controlled intersection of Hamilton Avenue & I-110 Southbound ramps (Intersection #25) was also analyzed using the ICU methodology.

A signal warrant analysis was also performed for unsignalized intersections. It should be noted that the determination that an unsignalized intersection meets the criteria of a traffic signal warrant does not in itself require the installation of a signal. Rather, the decision on whether a traffic signal should be installed is made by the governing jurisdictions taking into consideration other factors such as distance to adjacent signalized intersections and interruption to traffic flow along the major street.

IMPACT CRITERIA AND SIGNIFICANCE THRESHOLDS

Intersections

Based on discussions with the County, the significance of the potential impacts of Project generated traffic at the signalized study intersections was determined using criteria identified in the County TIA Guidelines, which indicate that a project is considered to have a significant traffic impact on a signalized intersection if the increase in the V/C ratio attributable to the project exceeds a specific threshold depending on the pre-Project intersection LOS. The County has developed a sliding scale methodology in which the minimum allowable increase in the V/C ratio attributable to a project decreases as the V/C ratio of the intersection increases:

Intersection Conditions without Project Traffic		Project-related Increase in V/C Ratio
LOS	V/C	
A, B	0.00 – 0.70	Causing V/C to 0.75 or worse
C	0.71 - 0.80	Equal to or greater than 0.04
D	0.81 - 0.90	Equal to or greater than 0.02
E, F	> 0.91	Equal to or greater than 0.01

Source: County of Los Angeles.

The relative impact of the added traffic volumes to be generated by the Project and cumulative projects was evaluated based on analysis of existing and future operating conditions at the study intersections, with and without the Project. Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. If the intersection, however, is operating at LOS F after the addition of project traffic and the incremental change in the V/C ratio is 0.010 or greater, the project would be considered to have a significant impact. A project is considered to have a significant impact if an intersection operates at LOS A or B and the addition of project traffic causes the V/C ratio to increase to 0.75 or higher; however, no significant impact is projected if the intersection is projected to operate at LOS A or B before and after a project regardless of the volume of traffic added to the intersection or the incremental change in the V/C ratio. In general, according to the significant impact criteria, the higher the V/C ratio, the lower the amount of project traffic that can be added before causing a significant impact.

Because many of the study intersections are located within the City of Carson, a supplemental analysis using the City of Carson significant impact criteria and analysis methodology was prepared for informational purposes and is provided in Appendix E.

ADDITIONAL TRAFFIC ANALYSES

Congestion Management Program

An analysis also was conducted according to *2010 Los Angeles County Congestion Management Program* (Los Angeles County Metropolitan Transportation Authority [Metro], 2010) (CMP) guidelines. The CMP is a State-mandated program that serves as the monitoring and analytical basis for transportation funding decisions in the County made through the Regional Transportation Improvement Program and State Transportation Improvement Program processes. The CMP requires that a Traffic Impact Analysis (TIA) be performed (1) for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the morning or afternoon weekday peak hours and (2) all mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the morning or afternoon weekday peak hours. In addition, it requires a review of potential impacts to the regional transit system.

The required CMP analyses were performed, as detailed in Chapter 9, in accordance with the TIA guidelines referenced in the CMP.

State of California Senate Bill No. 743

Senate Bill 743 (Steinberg, 2013) (SB 743), made effective in January 2014, requires the Governor's Office of Planning and Research to update the California Environmental Quality Act guidelines regarding the analysis of transportation impacts. Under SB 743, the focus of transportation analysis will shift from driver delay to vehicle miles traveled (VMT), reduction of greenhouse gas emissions (GHG) and creation of multimodal networks. Although originally scheduled to be fully implemented in guidelines by January 1, 2016, an extension has allowed cities more time to establish an analysis methodology.

The Project characteristics (e.g., its location, access to other nearby destinations, pedestrian connections, bicycle amenities, etc.) would encourage non-auto modes of transportation such as walking, bicycling, carpool, vanpool, transit, etc. Further, the school children attending the Learning Center and many of the teams competing at the venues will be arriving via bus or carpool, which reduces the number of single occupant vehicles traveling to/from the Project site. The Project would, therefore, reduce vehicle trips and encourage walking, public transit ridership, carpooling, and bicycle travel, which results in corresponding reductions in VMT, air quality emissions and transportation-related GHG emissions.

Supplemental California Department of Transportation (Caltrans) Analysis

An analysis of Caltrans facilities was conducted using HCM methodology, in accordance with *Local Development – Intergovernmental Review Program Interim Guide* (Caltrans, Approved September 2016) (Caltrans Interim Guide). The Caltrans supplemental analysis is provided in Chapter 10.

Additional Review and Analysis

In addition to the analyses discussed above, this study includes a review of the Project access, circulation and parking. A construction impact analysis is provided in Appendix F.

ORGANIZATION OF REPORT

This report is divided into 13 chapters, including this introduction. Chapter 2 describes the existing circulation system, traffic volumes, and traffic conditions in the Study Area (year 2018). Chapter 3 forecasts the Project traffic. Chapter 4 presents the intersection operating conditions associated with completion and occupancy of the Project under Existing Conditions (year 2018). Chapter 5 presents the intersection operating conditions associated with construction of the Project under Future Conditions (Year 2020). Chapter 6 presents the signal warrant analysis for the unsignalized intersections. Chapter 7 details the proposed mitigation measures. Chapter 8 describes the Event Management Plan for the Project. Chapter 9 presents the regional CMP

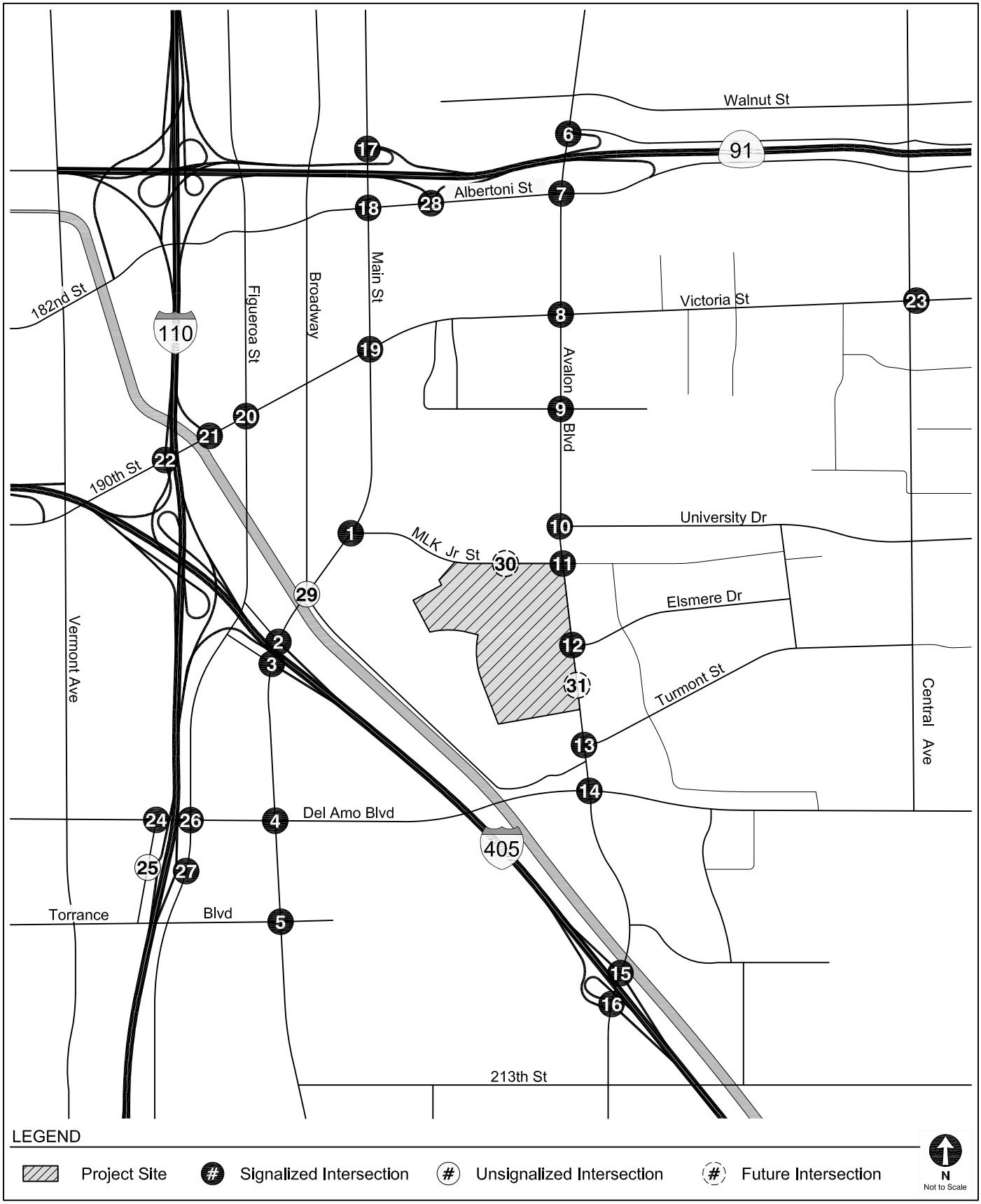
analysis. Chapter 10 details the Caltrans analysis. Chapter 11 describes site access and internal circulation and Chapter 12 details the parking analysis. Chapter 13 provides a summary of the analyses. The Appendices contain supporting documentation and additional details of the technical analyses, as well as the additional analysis described above.



SOURCE: MEIS. February, 2019.

CONCEPTUAL SITE PLAN

FIGURE 1



STUDY AREA

FIGURE 2

TABLE 1
STUDY INTERSECTIONS

No.	N/S Street	E/W Street	Jurisdiction	Analyzed Period(s)
1.	Main Street	Martin Luther King, Jr Street	City of Carson	Weekday/Saturday
2.	Main Street	I-405 NB Off-Ramp	City of Carson/Caltrans	Weekday/Saturday
3.	Main Street	I-405 SB On-Ramp	City of Carson/Caltrans	Weekday/Saturday
4.	Main Street	Del Amo Boulevard	City of Carson	Weekday
5.	Main Street	Torrance Boulevard	City of Carson	Weekday
6.	Avalon Boulevard	Artesia Bl/SR-91 WB On-Ramp	City of Carson/Caltrans	Weekday
7.	Avalon Boulevard	Albertoni Street	City of Carson	Weekday
8.	Avalon Boulevard	Victoria Street	City of Carson	Weekday
9.	Avalon Boulevard	184th Street-StubHub Center Gate	City of Carson	Weekday
10.	Avalon Boulevard	University Drive	City of Carson	Weekday
11.	Avalon Boulevard	Martin Luther King, Jr Street	City of Carson	Weekday/Saturday
12.	Avalon Boulevard	Elsmere Drive	City of Carson	Weekday/Saturday
13.	Avalon Boulevard	Turmont Street	City of Carson	Weekday/Saturday
14.	Avalon Boulevard	Del Amo Boulevard	City of Carson	Weekday/Saturday
15.	Avalon Boulevard	I-405 NB Ramps	City of Carson/Caltrans	Weekday/Saturday
16.	Avalon Boulevard	I-405 SB Ramps	City of Carson/Caltrans	Weekday/Saturday
17.	Main Street	SR-91 WB Ramps	City of Carson/Caltrans	Weekday/Saturday
18.	Main Street	Albertoni Street	City of Carson	Weekday/Saturday
19.	Main Street	Victoria Street	City of Carson	Weekday
20.	Figueroa Street	Victoria Street	City of Carson/City of Los Angeles	Weekday
21.	I-110 NB On-Ramp	190th Street	City of Los Angeles/Caltrans	Weekday/Saturday
22.	I-110 SB Off-Ramp	190st Street	City of Los Angeles/Caltrans	Weekday/Saturday
23.	Central Avenue	Victoria Street	City of Carson	Weekday
24.	Hamilton Avenue	Del Amo Boulevard	County of Los Angeles	Weekday
25 [a].	Hamilton Avenue	110 SB Ramps	County of Los Angeles/Caltrans	Weekday
26.	Figueroa Street	Del Amo Boulevard	City of Carson	Weekday
27.	Figueroa Street	110 NB Ramps	City of Carson/Caltrans	Weekday
28.	SR-91 EB Ramps	Albertoni Street	City of Carson/Caltrans	Weekday/Saturday
29. [a]	Main Street	Broadway	City of Carson	Weekday
30. [b]	New Driveway	Martin Luther King, Jr Street	City of Carson	Weekday/Saturday
31. [b]	Avalon Boulevard	New Driveway	City of Carson	Weekday/Saturday

Notes:
[a] Unsignalized intersection
[b] Future intersection

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS

Level of Service	V/C Ratio	Delay (Unsignalized Intersections) [a]	Definition
A	0.000 - 0.600	≤ 10	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 - 0.700	> 10 and ≤ 15	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	> 15 and ≤ 25	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	> 25 and ≤ 35	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	> 35 and ≤ 50	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	> 50	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Notes:

Source: *Transportation Research Circular No. 212, Interim Materials on Highway Capacity* (Transportation Research Board, 1980) and *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016).

[a] Measured in seconds.

Chapter 2
Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the Project Study Area. Within this Study Area, the Existing Conditions analysis includes an assessment of the existing street system, an analysis of traffic volumes and current operating conditions, and an assessment of the existing public transit service, as well as pedestrian and bicycle circulation at the time of the NOP issuance.

STUDY AREA

As mentioned, the Project site is bounded by Martin Luther King, Jr. Street to the north, Avalon Boulevard to the east, and The Creek and the remaining portion of the Victoria Golf Course to the south and west. The Study Area is shown in Figure 2.

A traffic analysis study area generally comprises those intersections with the greatest potential to experience significant traffic impacts due to the Project, including intersections that are:

1. Immediately adjacent or in close proximity to the project site
2. In the vicinity of the project site that are documented to have current or projected future adverse operational issues
3. In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements (e.g., at freeway ramp intersections)

The Project Study Area was established in consultation with the County, the City of Carson, and Caltrans, based on the above criteria, as well as peak hour Project trip generation, the anticipated distribution of Project traffic, and the existing intersections/corridor operations. It comprises those intersections with the reasonable potential to experience significant traffic impacts due to the Project.

A total of 29 existing intersections were identified during the MOU process for detailed analysis of the above conditions. In addition, the Project proposes to add a new intersection on Martin Luther King, Jr. Street. An additional intersection on Avalon Boulevard, between Elsmere Drive and Turmont Avenue, has been proposed to be developed by The Creek, resulting in a total of 31 study intersections. Figure 2 illustrates the location of the Project site in relation to the surrounding street system and the 31 study intersections. The existing lane configurations at the analyzed intersections are provided in Appendix B.

EXISTING STREET SYSTEM

The existing street system in the Study Area consists of a regional roadway system including freeways, primary and secondary arterials, and collector and local streets that provide regional, sub-regional, or local access and circulation within the Study Area. These transportation facilities generally provide two to six travel lanes and usually allow parking on both sides of the street. Typically, the speed limits range between 25 and 35 miles per hour (mph) on the streets and between 55 and 65 mph on freeways.

Street classifications are designated in *City of Carson General Plan* (City of Carson, 2004) (General Plan) for City of Carson streets and in *Mobility Plan 2035, An Element of the General Plan* (Los Angeles Department of City Planning, January 2016) (the Mobility Plan) for City of Los Angeles streets.

The facilities in the Study Area located within the City of Carson are defined by the following in the General Plan:

- State Highways and Freeways are controlled access, high-speed roadways with grade-separated interchanges intended to expedite movement between distant areas in the region. Planning, design, construction and maintenance of freeways in California are the responsibility of Caltrans.

  Major Highways function to connect traffic from collectors to the major freeway systems as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link principal elements within the City of Carson to other adjacent regions. These facilities typically handle inter-city vehicular trips in the magnitude of 25,000 or more vehicles per day. Typically, curb parking is prohibited during peak periods. Raised medians to separate opposing flows are typical and access

control (i.e., driveways and minor intersecting streets) is often minimized. Separate left-turn lanes at major signalized intersections are required, with double left-turn lanes often provided. Separate right-turn lanes, which may also serve as bus loading areas, are provided at locations where warranted by high-turn volumes. Major highways in the City of Carson require rights-of-way of 100 feet or more.

- Secondary Highways are similar to major highways in function. They connect traffic from collectors to the major freeway system. They move large volumes of automobiles, trucks and buses, and link principal elements within the City of Carson to other adjacent regions. These streets also handle intra-city trips in other adjacent regions. These roadways carry approximately 10,000 to 25,000 vehicles per day. Four to six through lanes are provided along with single or double left-turn lanes at major signalized intersections. Curb parking is often prohibited during peak periods. Secondary highways require a minimum right-of-way of 80 feet.

- Collector Streets are intended to serve as an intermediate route to handle traffic between local streets and arterials. In addition, collector streets provide access to abutting property. Collector streets are anticipated to carry traffic volumes between 2,000 to 5,000 vehicles per day, but some carry as many as 10,000 vehicles per day. A collector street may have one or two through lanes in each direction and curb parking is often provided. The primary function of the collector street is to collect vehicles from the local street system and transport them to the arterial system as efficiently as possible. Collector streets require a minimum right-of-way width of 60 feet.

- Local Streets principally provide vehicular, pedestrian, and bicycle access to property abutting the public right-of-way. Cross sections of local streets vary, depending on the abutting land uses, parking requirements, street trees, and other considerations. Where both sides of the street are served equally in residential areas, the common right-of-way width for a local street is 48-60 feet, with a 36-40-foot pavement width. In multi-family areas, where there is significant parking demand throughout the day, a minimum of 40 feet of pavement may be required, to provide two moving lanes of traffic in addition to street parking on both sides. In commercial and industrial areas, a minimum pavement width of 40 feet is necessary. In industrial areas, consideration of the predominant type of trucking, and whether or not maneuvering of trailers must be provided, may require a pavement width of 44 feet or more. Local streets can be expected to carry less than 1,500 vehicles per day. All other streets in the City of Carson not otherwise classified are local streets.

The facilities in the Study Area located within the City of Los Angeles are defined by the following in the Mobility Plan:

- Freeways are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses.

- Arterial Streets are major streets that serve through traffic, as well as provide access to major commercial activity centers. Arterials are divided into two categories:

- Boulevards represent the widest streets that typically provide regional access to major destinations and include two categories:
    - Boulevard I provides up to four travel lanes in each direction with a target operating speed of 40 mph
    - Boulevard II provides up to three travel lanes in each direction with a target operating speed of 35 mph
- Avenues pass through both residential and commercial areas and include three categories:
    - Avenue I provides up to two travel lanes in each direction with a target operating speed of 35 mph
    - Avenue II provides up to two travel lanes in each direction with a target operating speed of 30 mph
    - Avenue III provides up to two travel lanes in each direction with a target operating speed of 25 mph

- Collector Streets are generally located in residential neighborhoods and provide access to and from arterial streets for local traffic and are not intended for cut-through traffic. They provide one travel lane in each direction with operating speed of 25 mph.
- Local Streets are intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street. They provide one travel lane in each direction with a target operating speed of 15 to 20 mph. Local streets include two categories:
    - Continuous local streets connect to other streets at both ends
    - Non-continuous local streets lead to a dead-end

Primary regional access to the Project site is provided by I-110, I-405 and SR 91. The major arterials providing regional and sub-regional access to the Project vicinity include Avalon Boulevard and Del Amo Boulevard. The following is a brief description of the major roadways in the Study Area:

Freeways

- I-405 – I-405 generally runs in the southeast-northwest direction and is located 0.3 miles southwest of the Project site. In the vicinity of the Study Area, I-405 generally provides five general purpose lanes and one carpool lane in each direction. Access to and from I-405 is available via interchanges at Avalon Boulevard, Main Street, 190th Street, and Vermont Avenue.

- I-110 – I-110 generally runs in the north-south direction and is located 0.75 miles west of the Project site. In the vicinity of the Study Area, I-110 generally provides four lanes in each direction. Access to and from I-10 is available via interchanges at Hamilton Avenue, Figueroa Street, and 190th Street.

- SR 91 – SR 91 generally runs in the east-west direction and is located 1.3 miles north of the Project site. In the vicinity of the Study Area, SR 91 generally provides four lanes in each direction and an eastbound carpool lane. Access to and from SR 91 is available via interchanges at Vermont Avenue, Main Street, Albertoni Street, and Avalon Boulevard.

Roadways

- Figueroa Street – Figueroa Street is a designated Major Highway in the General Plan south of 190th Street and a designated Avenue I in the Mobility Plan north of 190th Street. The street runs in the north-south direction and is located west of the Project site. It generally provides four lanes, two in each direction, with left-turn lanes at intersections. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 80 feet.

- Main Street – Main Street is a designated Major Highway in the General Plan and runs in the north-south direction. It is located west of the Project site and generally provides four lanes, two in each direction, with left-turn lanes at intersections. Some unmetered parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 84 feet.

- Avalon Boulevard – Avalon Boulevard is a designated Major Highway in the General Plan and runs in the north-south direction. It is located adjacent to the eastern boundary of the Project site and provides access to the Project site. The street generally provides six lanes, three in each direction, with left-turn lanes at intersections. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 128 feet.

- 182nd Street – 182nd Street is a designated Avenue II in the Mobility Plan and runs in the east-west direction. It is located north of the Project site and generally provides four lanes, two in each direction, with a left-turn median. Some unmetered on-street parking is available on the south side of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 60 feet.

- Albertoni Street – Albertoni Street is a designated Secondary Highway in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides four to five lanes, two in each direction with a third eastbound lane east of Main Street and a left-turn median. On-street parking is generally available on both sides of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 84 feet.

- Victoria Street – Victoria Street is a designated Major Highway in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides four lanes, two in each direction, and left-turn lanes at intersections. No on-street parking

is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 84 feet.

- 190th Street – 190th Street is a designated Boulevard II in the Mobility Plan and runs in the east-west direction. It is located northwest of the Project site and generally provides four to five lanes, two in each direction with a third lane west of I-110 and a left-turn median. Some unmetered on-street parking is available on the south side of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 60 feet.

- 184th Street – 184th Street is a local street in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides two lanes, one in each direction. It also serves as the main entrance to the StubHub Center. Unmetered on-street parking is generally available within the Study Area. Lane width is generally 12 feet and the total paved width is generally 36 feet.

- University Drive – University Drive is a designated Secondary Highway in the General Plan and runs in the east-west direction. It is located north of the Project site and generally provides four lanes, two in each direction, and a left-turn median. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 80 feet.

- Martin Luther King, Jr. Street – Martin Luther King, Jr. Street is a designated Collector street in the General Plan and runs in the east-west direction. It is located adjacent to the northern boundary of the Project Site and provides access to the Project site. The street generally provides two lanes, one in each direction, and a left-turn median. Unmetered on-street parking is generally available on both sides of the street within the Study Area. Lane width is generally 12 feet and the total paved width is generally 60 feet.

- Elsmere Drive – Elsmere Drive is a local street in the General Plan and runs in the east-west direction. It is located east of the Project site and serves as one of the entrances to the Project Site. Two lanes are generally provided in each direction and unmetered on-street parking is available on both sides of the street within the Study Area. Lane width is generally 12 feet and the total paved width is generally 36 feet.

- Del Amo Boulevard – Del Amo Boulevard is a designated Major Highway in the General Plan and runs in the east-west direction. It is located south of the Project site and generally provides four to six lanes, two to three in each direction, and left-turn lanes at intersections. No on-street parking is available within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 86 feet.

- Torrance Boulevard – Torrance Boulevard is a designated Major Highway in the General Plan and runs in the east-west direction. It is located south of the Project site and generally provides four lanes, two in each direction, and a left-turn median. Unmetered on-street parking is generally available on the north side of the street within the Study Area. Inside lane width is generally 10 feet and the total paved width is generally 64 feet.

The existing lane configurations at the analyzed intersections are provided in Appendix B.

EXISTING TRANSIT SYSTEM

The Project area is served by bus lines operated by Metro, Long Beach Transit, Torrance Transit, and Carson Circuit. Figure 3 illustrates the existing transit service in the Study Area.

Table 3 summarizes the transit lines operating in and around the Study Area, including the type of service (peak vs. off-peak, express vs. local), frequency of service, service area, and hours of operation. The average frequency of transit service during the peak hour was derived from the number of peak period stops made at the stop nearest the Project site.

Transit ridership statistics provided by Metro was used, along with the frequency of service for each line and maximum seated and standing capacity of each bus, to determine the residual transit capacity of routes serving the Project site. Tables 4A and 4B summarize the total residual capacity of the transit lines within 0.25 miles walking distance of the Project site during the morning and afternoon peak hours, respectively. As shown, the transit lines serving the Project site currently have available capacity for 301 additional riders during the morning peak hour and 202 additional riders during the afternoon peak hour. No data was readily available for the Carson Circuit or Torrance Transit, so no capacity was assumed for those lines. The transit lines with bus stops or stations located more than 0.25 miles from the Project site were not included.

BICYCLE AND PEDESTRIAN NETWORK

Existing Bicycle System

Based on *Carson Master Plan of Bikeways* (City of Carson, 2013) for City of Carson streets and *2010 Bicycle Plan* (Los Angeles Department of City Planning, 2010) for City of Los Angeles streets, the existing bicycle system in the Study Area consists of a limited coverage of bicycle paths (Class I), bicycle lanes (Class II), and bicycle routes (Class III). Bicycle lanes are a component of street design with dedicated striping, separating vehicular traffic from bicycle traffic. These facilities offer a safer environment for both cyclists and motorists. Bicycle routes are identified as bicycle-friendly streets where motorists and cyclists share the roadway and there is no dedicated striping of a bicycle lane. Bicycle routes are preferably located on collector

and lower volume arterial streets. Bicycle lanes are provided along Avalon Boulevard, Del Amo Boulevard and University Drive and a bicycle route is designated along Turmont Street.

Existing Pedestrian Facilities

The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile; these attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses adjacent to residential neighborhoods, the walkability of the Study Area is approximately 52 points[5]. This compares to a City of Carson average of 53 points.

The existing sidewalks that serve as routes to the Project site provide proper connectivity to pedestrian crossings at intersections within the Study Area and adequate widths for a comfortable and safe pedestrian environment. There currently is no sidewalk on the south side of Martin Luther King, Jr. Street adjacent to the northern boundary of the Project site.

The signalized intersections adjacent to the Project site provide pedestrian phasing, crosswalk striping, and Americans with Disabilities Act wheelchair ramps. The pedestrian crossing at the intersection of Elsmere Drive & Avalon Boulevard provides connectivity between the adjacent neighborhood and the Project site.

VISION ZERO

As described in *Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025* (City of Los Angeles, August 2015), Vision Zero is a traffic safety policy that promotes strategies to eliminate collisions that result in severe injury or death in the City of Los Angeles. Vision Zero has identified the High Injury Network, a network of streets based on the collision data from the last five years, where strategic investments will have the biggest impact in reducing death and

[5] WalkScore.com rates the Project site (340 Martin Luther King, Jr. Street) with a score of 52 of 100 possible points (scores accessed on August 14, 2018). WalkScore calculates the walkability of specific addresses by taking into account the ease of living in the neighborhood with a reduced reliance on automobile travel.

severe injury. Vision Zero has not identified any streets within the Study Area as part of the High Injury Network.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

This section presents the existing peak hour turning movement traffic volumes for the intersections analyzed in the study, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each intersection indicating V/C ratios or delay and LOS.

Existing Traffic Volumes

Intersection turning movement counts were conducted in 2018 at the 29 existing study intersections during the weekday morning (7:00 AM to 10:00 AM) and afternoon peak period (3:00 PM to 6:00 PM). The Saturday turning movement counts represent the midday (12:00 PM to 2:00 PM) period. These mid-day volumes were derived from two sources: newly collected traffic volumes during the mid-day period and volumes adjusted from the weekday afternoon peak period[6].

These volumes are shown in Figures 4A and 4B, respectively. Intersection lane configurations are shown in Appendix B. Intersection turning movement count sheets are provided in Appendix C.

Existing Unsignalized Intersection Analysis

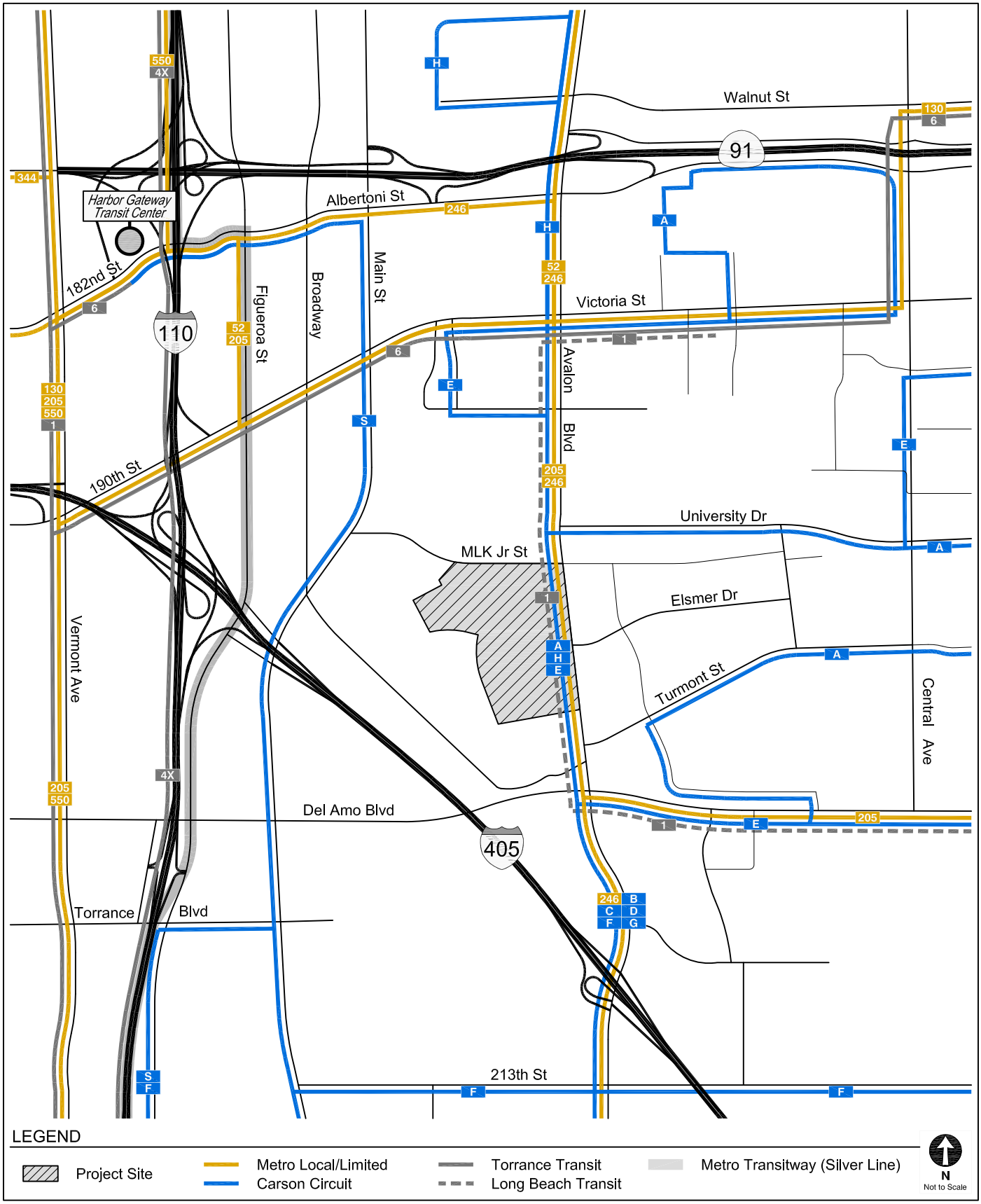
A signal warrant analysis was performed for the two unsignalized intersections. As detailed in Chapter 6, one of the two unsignalized intersections, Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrant criteria under the existing traffic conditions.

[6] Counts at a total of nine intersections were collected during both the weekday afternoon and Saturday mid-day peak periods. An overall adjustment factor was developed from a comparison of the weekday and Saturday traffic volumes. This adjustment factor was then applied to the weekday afternoon traffic volumes at the six intersections identified for Saturday analysis that did not have Saturday traffic counts.

Existing Intersection Levels of Service

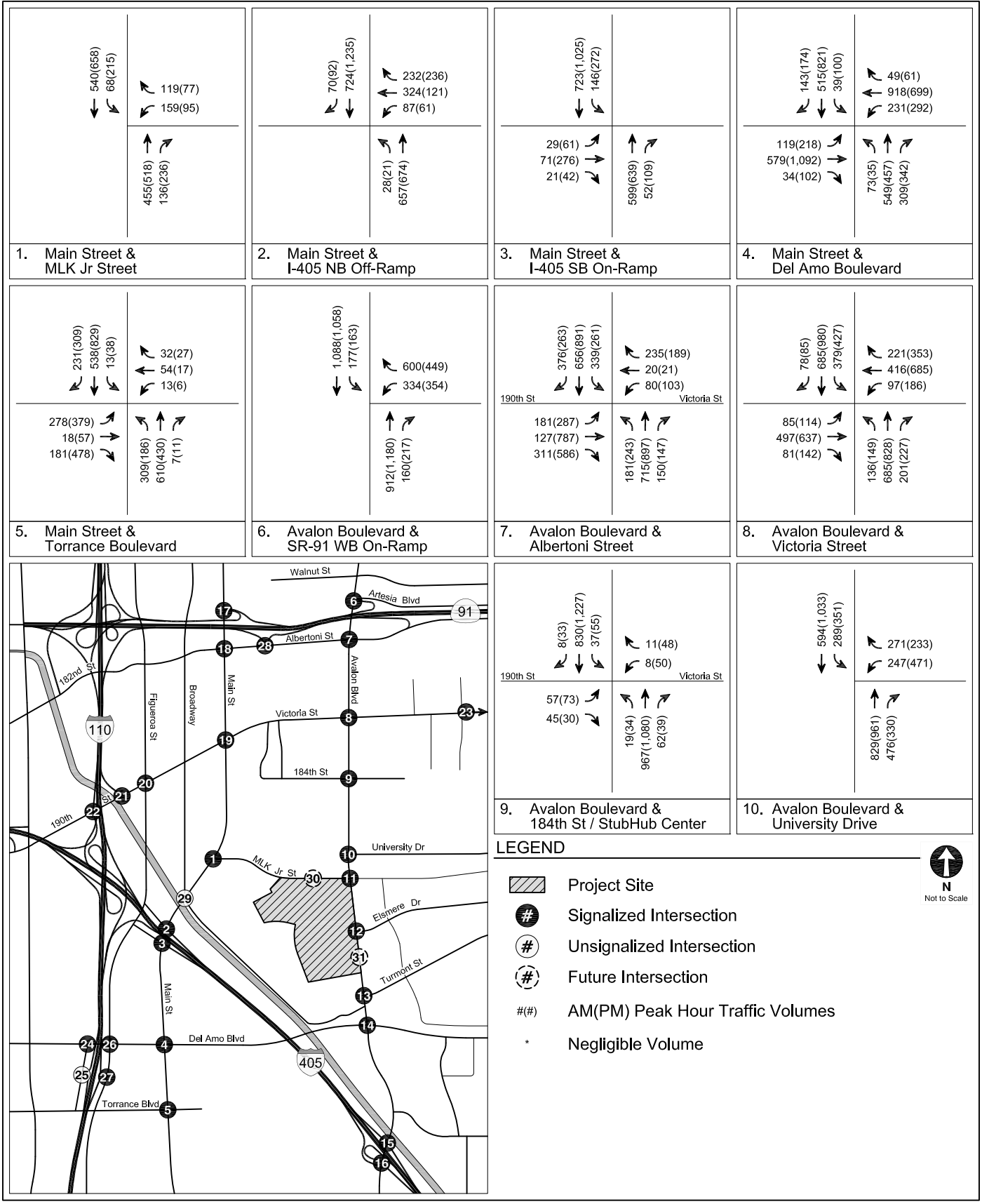
The existing (year 2018) weekday morning and afternoon peak hour turning movements presented in Figures 4A and 4B were used in conjunction with the LOS methodology described above to determine existing (year 2018) operating conditions at each of the study intersections. Tables 5A and 5B summarize the weekday morning, weekday afternoon and Saturday midday peak hour V/C ratio and corresponding LOS at each study intersection under Existing Conditions. The results of this analysis indicate that 28 of the 29 study intersections are currently operating at LOS D or better during the weekday morning and afternoon peak hours, as shown in Table 5A. The unsignalized intersection at Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) operates at LOS E during the morning peak hour and LOS F during the afternoon peak hour. Under existing weekend conditions, as shown in Table 5B, all 15 existing study intersections are currently operating at LOS A or LOS B during the weekend mid-day peak hour.

LOS calculation worksheets are provided in Appendix D.



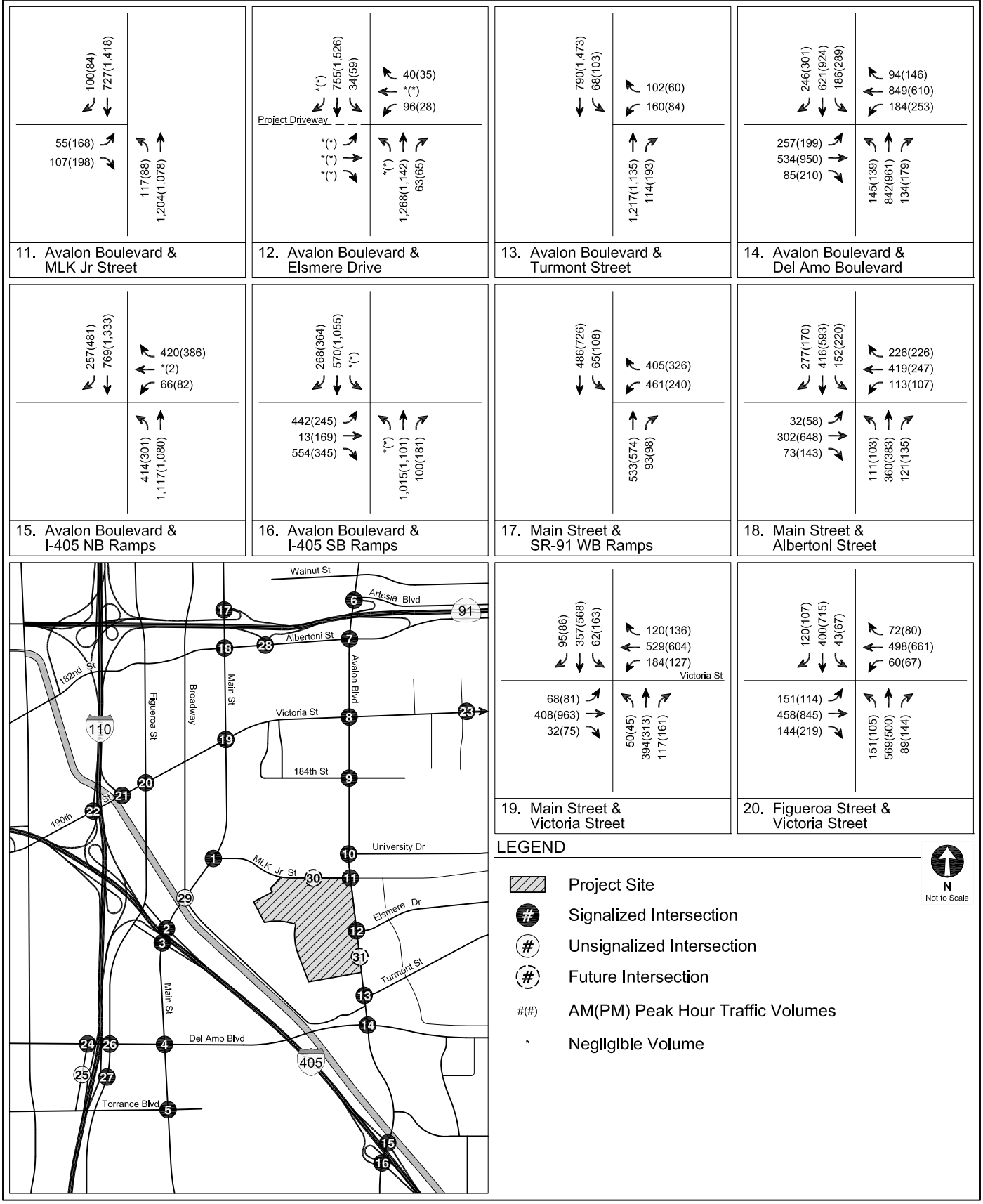
EXISTING TRANSIT SERVICE

FIGURE 3



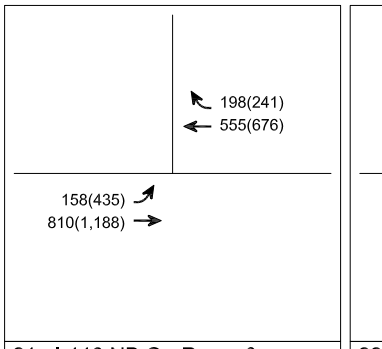
EXISTING CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 4A

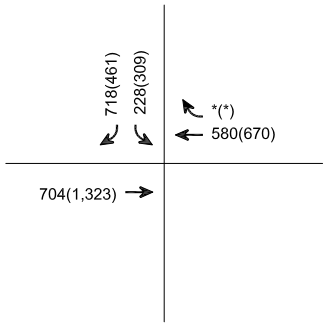


EXISTING CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

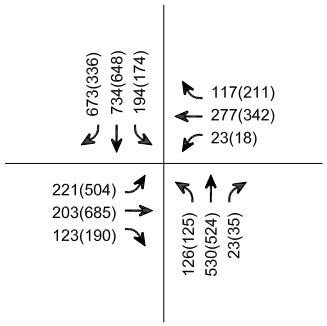
FIGURE 4A (CONT.)



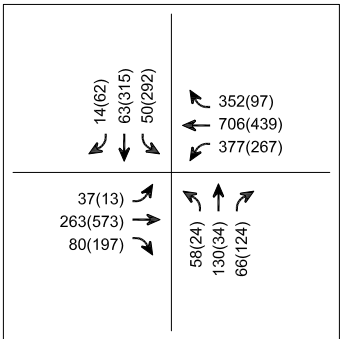
21. I-110 NB On-Ramp & 190th Street



22. I-110 SB Off-Ramp & 190th Street



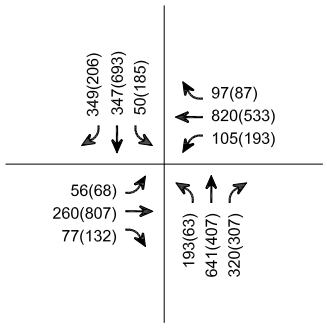
23. Central Avenue & Victoria Street



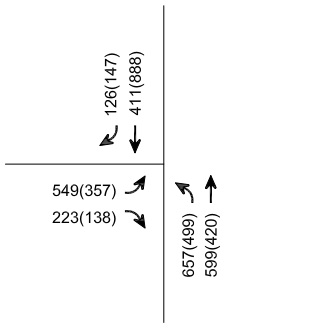
24. Hamilton Avenue & Del Amo Boulevard



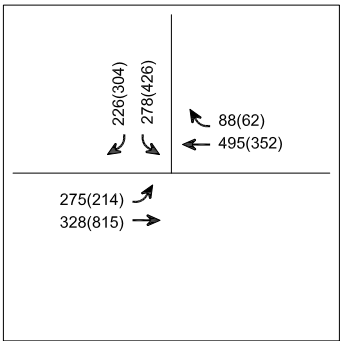
25. Hamilton Avenue & I-110 SB Ramps



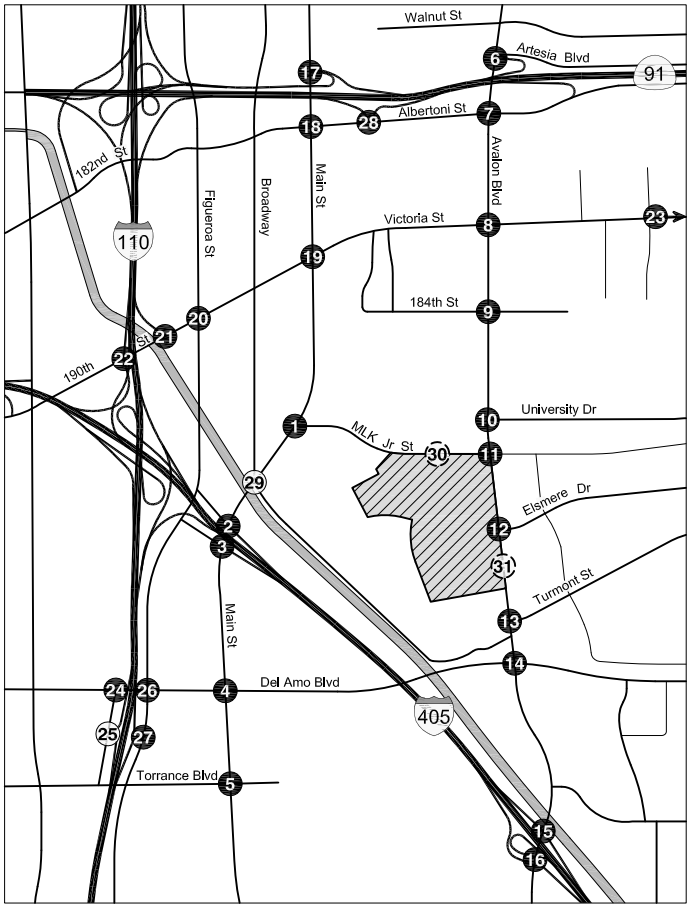
26. Figueroa Street & Del Amo Boulevard

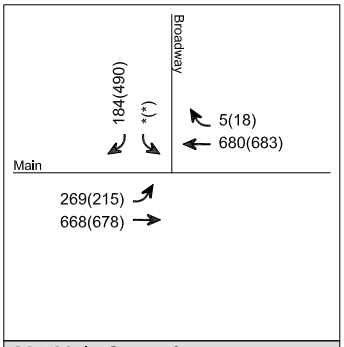


27. Figueroa Street & I-110 NB Ramps



28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

Future Intersection

30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

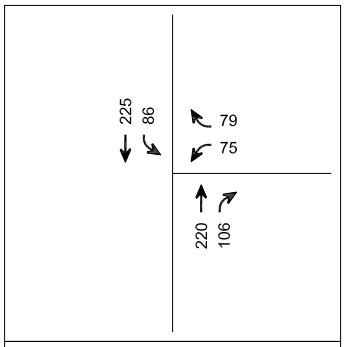
- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

Future Intersection

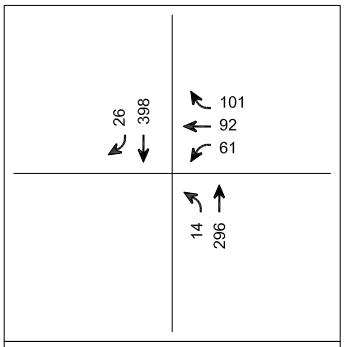
31. Avalon Boulevard & New Driveway

EXISTING CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

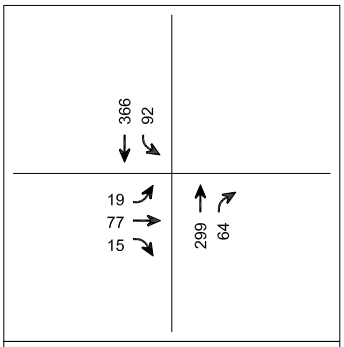
FIGURE 4A (CONT.)



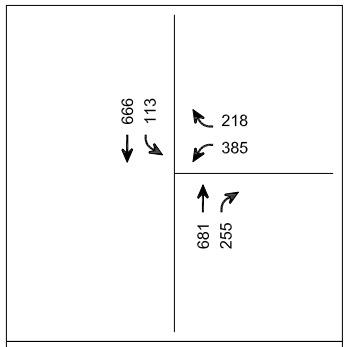
1. Main Street & MLK Jr Street



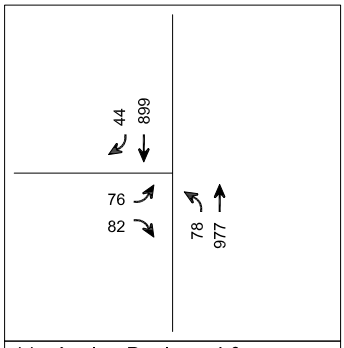
2. Main Street & I-405 NB Off-Ramp



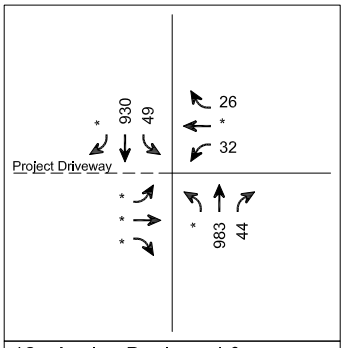
3. Main Street & I-405 SB On-Ramp



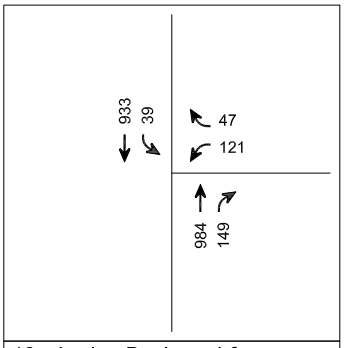
6. Avalon Boulevard & SR-91 WB On-Ramp



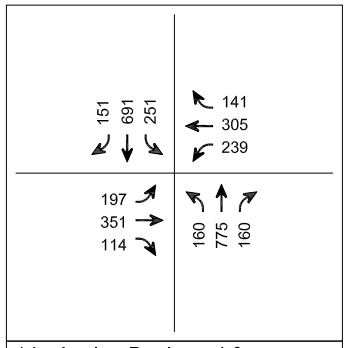
11. Avalon Boulevard & MLK Jr Street



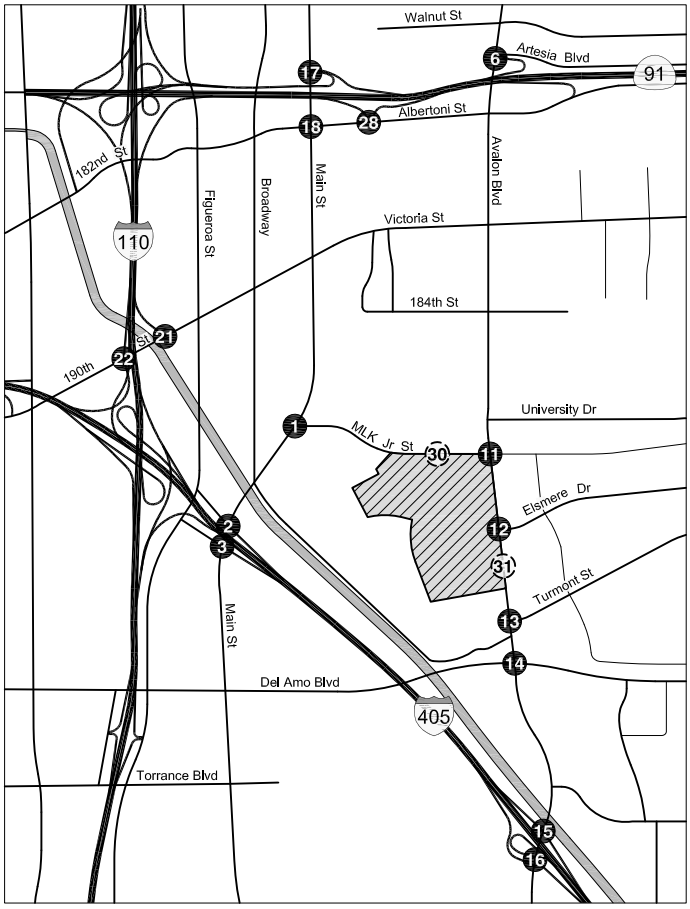
12. Avalon Boulevard & Elsmere Drive

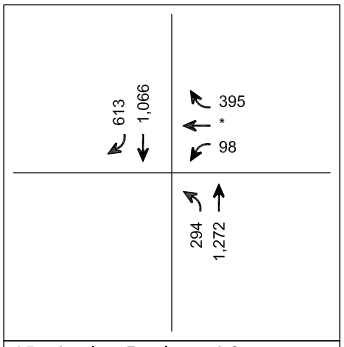


13. Avalon Boulevard & Turmont Street

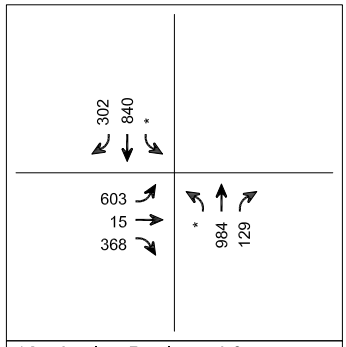


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

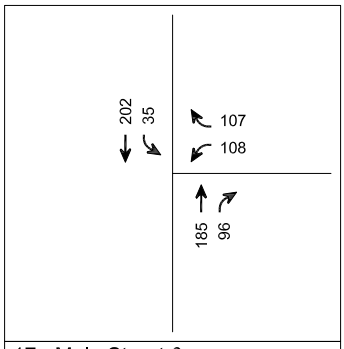
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

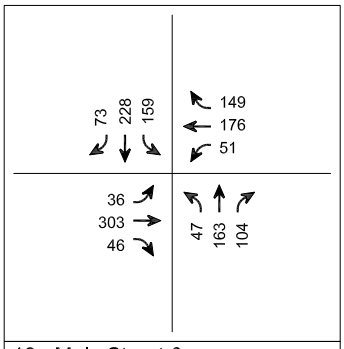
N
Not to Scale

EXISTING CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

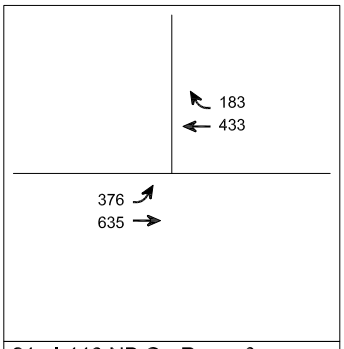
FIGURE 4B



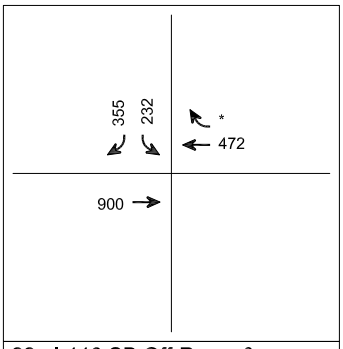
17. Main Street & SR-91 WB Ramps



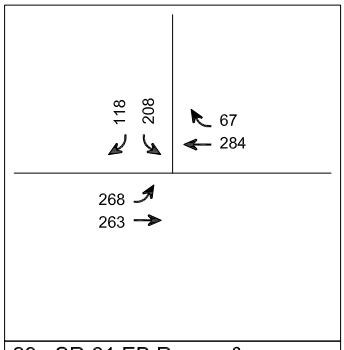
18. Main Street & Albertoni Street



21. I-110 NB On-Ramp & 190th Street



22. I-110 SB Off-Ramp & 190th Street



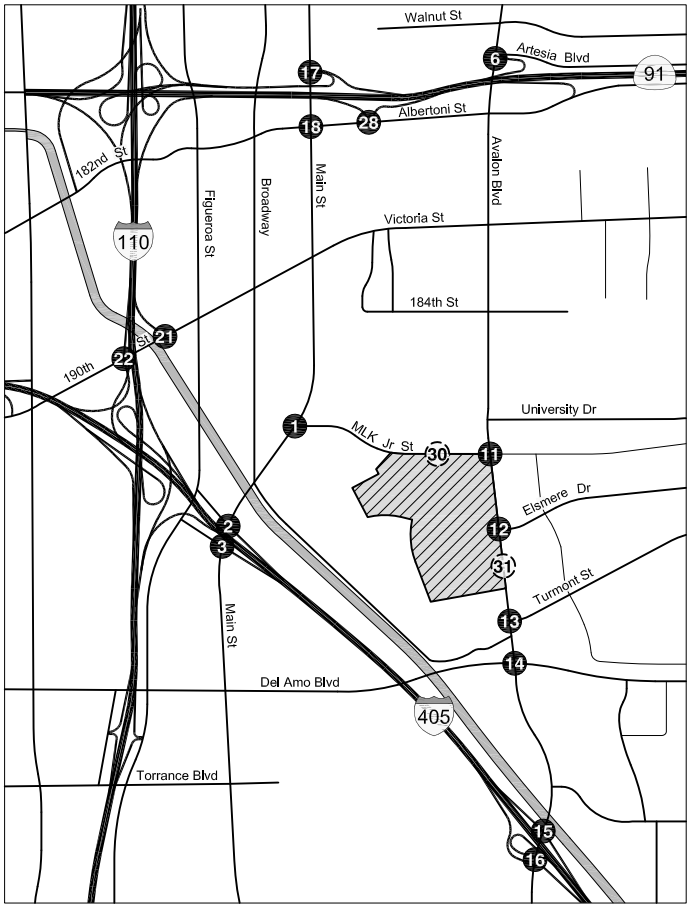
28. SR-91 EB Ramps & Albertoni Street

Future Intersection

30. New Driveway & Martin Luther King Jr Street

Future Intersection

31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

N
Not to Scale

EXISTING CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
4B (CONT.)

TABLE 3
EXISTING TRANSIT SERVICE

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes)			
				Morning Peak Period		Afternoon Peak Period	
Metro				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
52	Downtown Los Angeles - Compton via Avalon Boulevard	Local	5:00 A.M. - 10:30 P.M.	20	18	24	24
130	Norwalk - Hermosa Beach via Artesia Boulevard	Local	5:00 A.M. - 9:00 P.M.	40	30	48	48
205	Willowbrook - San Pedro via Vermont Avenue	Local	5:30 A.M. - 11:00 P.M.	34	30	40	45
246	Harbor Gateway - San Pedro via Avalon Boulevard	Local	4:30 A.M. - 2:00 A.M.	27	34	30	30
344	Rancho Palos Verdes - Carson via Artesia Boulevard	Local	5:00 A.M. - 9:30 P.M.	40	24	24	40
550	San Pedro - Exposition Park via Vermont Avenue	Express	5:00 A.M. - 11:00 P.M.	34	34	34	34
Carson Circuit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
A	South Bay Pavilion - Cal State Dominguez Hills via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
B	South Bay Pavilion - Moneta via Main Street	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
C	South Bay Pavilion - Civic Center via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
D	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
E	South Bay Pavilion - Del Amo/Wilmington via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
F	South Bay Pavilion - Civic Center via 223rd Street	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
G	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	Local	5:20 A.M. - 6:40 P.M.	N/A	40	N/A	40
H	South Bay Pavilion - Hemmingway Park via Avalon Boulevard	Local	5:20 A.M. - 6:40 P.M.	40	N/A	40	N/A
Torrance Transit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
1	Torrance - Harbor Freeway Station via I-110	Local	5:00 A.M. - 11:00 P.M.	40	27	40	42
4x	Downtown Los Angeles - Torrance via I-110	Express	5:00 A.M. - 8:00 P.M. [a]	40	50	45	42
6	Torrance - Carson - Artesia Station via 190th Street/Victoria Street	Local	5:00 A.M. - 8:30 P.M.	40	40	40	48
Long Beach Transit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
1	Downtown Long Beach - Cal State Dominguez Hills via Del Amo Boulevard	Local	4:30 A.M. - 11:00 P.M.	34	30	30	34
Metro Transitway				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Silver	El-Monte - Downtown Los Angeles - San Pedro via I-110	Rapid	4:30 A.M. - 2:00 A.M.	6	6	6	6

Notes

[a] No midday service
Metro: Los Angeles County Metropolitan Transportation Authority
AM Peak from 6 AM - 10 AM
PM Peak from 3 PM - 7 PM

TABLE 4A
TRANSIT SYSTEM CAPACITY IN STUDY AREA - MORNING PEAK HOUR

Provider, Route, and Service Area		Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
			Peak Load		Average Load					
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus										
205	Willowbrook - San Pedro via Vermont Avenue	50	13	11	7	7	43	43	75	86
246	Harbor Gateway - San Pedro via Avalon Boulevard	50	23	32	15	15	35	35	79	61
Carson Circuit										
A	South Bay Pavilion - Cal State Dominguez Hills via Avalon Boulevard	30	*Data Not Available*							
B	South Bay Pavilion - Moneta via Main Street	30	*Data Not Available*							
C	South Bay Pavilion - Civic Center via Avalon Boulevard	30	*Data Not Available*							
D	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
E	South Bay Pavilion - Del Amo/Wilmington via Avalon Boulevard	30	*Data Not Available*							
F	South Bay Pavilion - Civic Center via 223rd Street	30	*Data Not Available*							
G	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
H	South Bay Pavilion - Hemmingway Park via Avalon Boulevard	30	*Data Not Available*							
Long Beach Transit										
1	Downtown Long Beach - Cal State Dominguez Hills via Del Amo Boulevard	50	*Data Not Available*							
								Total Transit Residual Capacity in Peak Hour		**301**

Notes:

Capacity assumptions based on discussions with agencies:
Metro Regular Bus - 40 seated / 50 seated and standing.
Metro Articulated Bus - 66 seated / 75 seated and standing standing.

[a] Number of runs in both directions combined during peak hour.

[b] Ridership information based on data from Metro for October 2017.

TABLE 4B
TRANSIT SYSTEM CAPACITY IN STUDY AREA - AFTERNOON PEAK HOUR

Provider, Route, and Service Area		Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
			Peak Load		Average Load					
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus										
205	Willowbrook - San Pedro via Vermont Avenue	50	9	11	7	8	43	42	32	42
246	Harbor Gateway - San Pedro via Avalon Boulevard	50	23	30	15	20	35	30	69	59
Carson Circuit										
A	South Bay Pavilion - Cal State Dominguez Hills via Avalon Boulevard	30	*Data Not Available*							
B	South Bay Pavilion - Moneta via Main Street	30	*Data Not Available*							
C	South Bay Pavilion - Civic Center via Avalon Boulevard	30	*Data Not Available*							
D	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
E	South Bay Pavilion - Del Amo/Wilmington via Avalon Boulevard	30	*Data Not Available*							
F	South Bay Pavilion - Civic Center via 223rd Street	30	*Data Not Available*							
G	South Bay Pavilion - Metro Blue Line Del Amo Station via Del Amo Boulevard	30	*Data Not Available*							
H	South Bay Pavilion - Hemmingway Park via Avalon Boulevard	30	*Data Not Available*							
Long Beach Transit										
1	Downtown Long Beach - Cal State Dominguez Hills via Del Amo Boulevard	50	*Data Not Available*							
								Total Transit Residual Capacity in Peak Hour		**202**

Notes:

Capacity assumptions based on discussions with agencies:
Metro Regular Bus - 40 seated / 50 seated and standing.
Metro Articulated Bus - 66 seated / 75 seated and standing standing.

[a] Number of runs in both directions combined during peak hour.

[b] Ridership information based on data from Metro for October 2017.

TABLE 5A
EXISTING CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)	
			V/C Ratio / Delay	LOS
1.	Main Street & MLK Jr Street	AM	0.415	A
		PM	0.524	A
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A
		PM	0.675	B
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A
		PM	0.702	C
4.	Main Street & Del Amo Boulevard	AM	0.665	B
		PM	0.864	D
5.	Main Street & Torrance Boulevard	AM	0.622	B
		PM	0.754	C
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A
		PM	0.570	A
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B
		PM	0.843	D
8.	Avalon Boulevard & Victoria Street	AM	0.590	A
		PM	0.736	C
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A
		PM	0.469	A
10.	Avalon Boulevard & University Drive	AM	0.667	B
		PM	0.723	C
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A
		PM	0.592	A
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A
		PM	0.435	A
13.	Avalon Boulevard & Turmont Street	AM	0.520	A
		PM	0.494	A
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C
		PM	0.897	D
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A
		PM	0.508	A
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B
		PM	0.586	A
17.	Main Street & SR-91 WB Ramps	AM	0.624	B
		PM	0.581	A
18.	Main Street & Albertoni Street	AM	0.688	B
		PM	0.814	D
19.	Main Street & Victoria Street	AM	0.525	A
		PM	0.736	C
20.	Figueroa Street & Victoria Street	AM	0.605	B
		PM	0.692	B
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A
		PM	0.471	A
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C
		PM	0.802	D
23.	Central Avenue & Victoria Street	AM	0.799	C
		PM	0.736	C
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A
		PM	0.768	C
25 [a].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E
		PM	81.8	F
[b]		AM	0.668	B
		PM	0.659	B
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C
		PM	0.822	D
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B
		PM	0.705	C
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A
		PM	0.621	B
29 [a].	Main Street & Broadway	AM	17.8	C
		PM	17.1	C
30.	New driveway & MLK Jr Street	AM	New Intersection	
		PM		
31.	Avalon Boulevard & New driveway	AM	New Intersection	
		PM		

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] A signal warrant was performed to determine significant impacts for unsignalized intersections. Warrants were met under Existing, Existing with Project, and Future with Project Conditions
[b] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology

TABLE 5B
EXISTING CONDITIONS (YEAR 2018) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)	
			V/C Ratio / Delay	LOS
1.	Main Street & MLK Jr Street	MD	0.303	A
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A
13.	Avalon Boulevard & Turmont Street	MD	0.436	A
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B
17.	Main Street & SR-91 WB Ramps	MD	0.277	A
18.	Main Street & Albertoni Street	MD	0.424	A
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A
30.	New driveway & MLK Jr Street	MD	New Intersection	
31.	AvalonBoulevard & New driveway	MD	New Intersection	

MD - Saturday Midday Peak Hour

Chapter 3
Project Traffic

This chapter describes the assumptions and methodology used in developing the traffic volumes associated with the proposed Project within the Study Area.

PROJECT DESCRIPTION

As described in Chapter 1, The Project involves the redevelopment of a portion of the VGC with new recreation programs that would offer sports and academic enrichment services to underprivileged youth in the greater Los Angeles area and recreation programs for the public. The Project site, owned by the County and located at 340 Martin Luther King, Jr. Street, is bounded by Martin Luther King, Jr. Street to the north, Avalon Boulevard to the east, and the remaining portion of the VGC to the south and west. A separate development, The Creek, is proposed on the remaining portion of the VGC.

PROJECT TRIP GENERATION

The trip generation estimates for the Project were developed based on the rates documented in *Trip Generation, 10th Edition* (Institute of Transportation Engineers [ITE], 2017) and *Trip Generation, 9th Edition* (ITE, 2012), as well as empirical trip generation rates derived for similar land uses.

Trip Generation Rates

The trip generation rates utilized for each land use component are described below:

Golf Course: The trip generation rates for the existing golf course (ITE Land Use Code 430) utilize *Trip Generation, 10th Edition* for weekday trip estimates and *Trip Generation, 9th Edition* (ITE, 2012) for weekend trip estimates[7].

Administrative Offices: The trip generation rates for the proposed administrative office space utilize *Trip Generation, 10th Edition* ITE Land Use Code 710 – General Office for both weekday and weekend trip estimates.

Soccer Center: The Soccer Center is proposed to be utilized by school/community users on weekdays, with youth/adult league and club play generally on weekend evenings and weekends and tournament play on weekends. The description of the weekday operation at the Soccer Center is consistent with the description of *Trip Generation, 10th Edition* ITE Land Use Code 488 – Soccer Complex. On weekends, tournament play is anticipated to occur at the Project and trip generation rates were developed from empirical data collected at the Placer Valley Sports Complex, which operates as a tournament-hosting multi-sports facility in Roseville, California. The empirical trip rates were based on tournament conditions at the sports complex and summarized in *Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex, Roseville, California* (Gibson Transportation Consulting, Inc., November 25, 2015).

Tennis Center: Daily activities at the Tennis Center are anticipated to include community uses, player development, recreational activities, and the operation of various USTAF programs. Additionally, the Tennis Center is anticipated to host tournaments at the local to collegiate level along with occasional special events (i.e., professional level tournament, etc.) A trip generation rate was derived from the tournament operation described by the USTAF and compared to the *Trip Generation, 10th Edition* ITE Land Use Code 490 – Tennis Courts rate. This comparison indicated that the derived trip generation rate was lower than the ITE trip rate. Based on this comparison and for the purposes of a conservative analysis, the operation of the Tennis Center is assumed to be encompassed by ITE Land Use Code 490; as such, this trip rate was used to develop the trip generation estimate.

[7] *Trip Generation, 10th Edition* does not provide a golf course weekend trip generation rate based on acreage.

Learning Center: The Tiger Woods Foundation has described the Learning Center operation as largely occurring on weekdays, with a daytime component for elementary school students and an after-school component for middle to high school students. Learning Center trips would mainly be generated by center staff and pick-up activities after school. Daytime elementary program students will be transported to the Learning Center by private bus. In addition to the academic programs, periodic programming and community events are anticipated on weekday evenings and on weekends. Based on the anticipated activity and for the purposes of a conservative analysis, the Learning Center is assumed to operate similarly to *Trip Generation, 10th Edition* ITE Land Use Code 495 – Recreational Community Center; as such, this trip rate was used to develop the trip generation estimates.

Player Development Facility: As described by USTAF, the Player Development Facility is an integral component of the Tennis Center and is anticipated to be used in conjunction with the tennis courts at the Tennis Center. Based on the anticipated activity level and for the purposes of a conservative analysis, the Player Development Facility is assumed to operate similarly to *Trip Generation, 10th Edition* ITE Land Use Code 495 – Recreation Community Center; as such, this trip rate was used to develop the trip generation estimates.

Other Recreational Amenities/Skate Park: Trip generation rates for the other recreational amenities were based on the empirical trip generation rates developed for a facility in Huntington Beach, California. Those trip rates are summarized in *Center Avenue Skatepark Traffic Analysis* (Austin-Foust Associates, Inc., 2011).

Other Uses: The Welcome Center and other small buildings for maintenance/storage activities either function as amenities to the Project or are ancillary to the primary uses for trip generation purposes and do not separately generate new trips.

The trip generation rates described above are summarized in Table 6.

Trip Generation Summary

The peak hour trip generation forecasts for the Project were derived from the trip generation rates described above. Project trip generation was analyzed during the weekday morning and afternoon peak hours, as well as the Saturday midday peak hour.

As detailed in Table 6, the Project is expected to generate 4,133 new weekday trips, including 205 morning peak hour and 460 afternoon peak hour trips. On Saturday, a total of 7,106 daily trips are estimated with 851 mid-day peak hour trips.

The existing portion of the VGC, to be replaced, is currently estimated to generate 325 weekday trips, including 17 morning peak hour and 24 afternoon peak hour trips. On Saturday, a total of 506 daily trips are estimated, including 56 mid-day peak hour trips.

Applying the existing trips to be removed from the existing portion of the VGC, the Project is estimated to generate 3,808 net new weekday trips, including 188 net new morning peak hour trips and 436 net new afternoon peak hour trips. On Saturday, a total of 6,600 net new daily trips are anticipated, including 795 net new mid-day peak hour trips.

PROJECT TRIP DISTRIBUTION

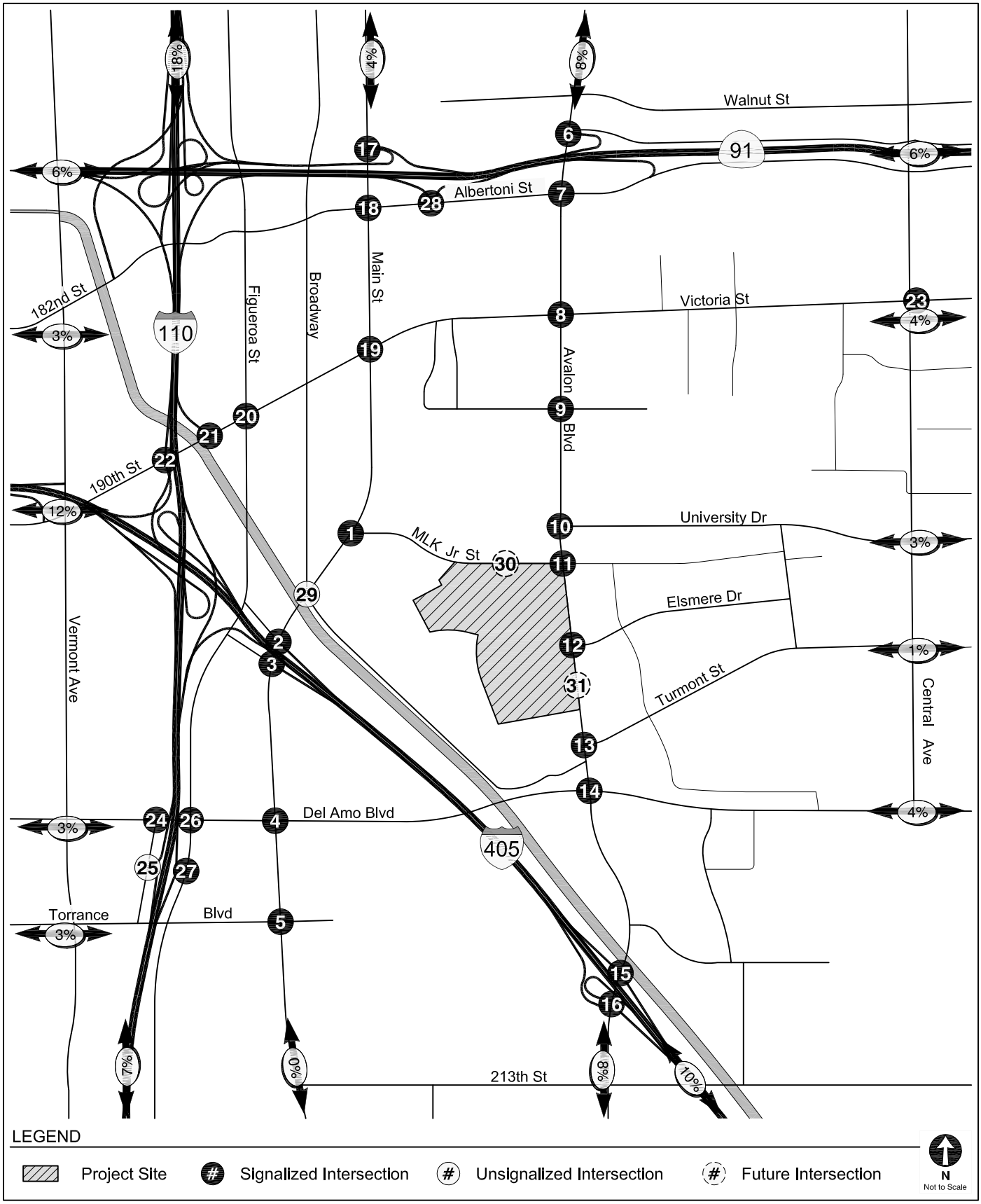
The geographic distribution of trips generated by the Project is dependent on the location of residential centers from which users of the Project would be drawn, characteristics of the street system serving the Project site, the level of accessibility of the routes to and from the Project site, existing intersection traffic volumes, the Project ingress/egress availability based on the proposed site access and circulation scheme, and the location of the proposed driveways, as well as input from LACDPW staff.

Based on these considerations, traffic entering and exiting the Project was assigned to the surrounding street system. The regional-level and intersection-level trip distribution pattern for the Project at the study intersections is shown in Figures 5 and 6. Generally, the pattern is as follows:

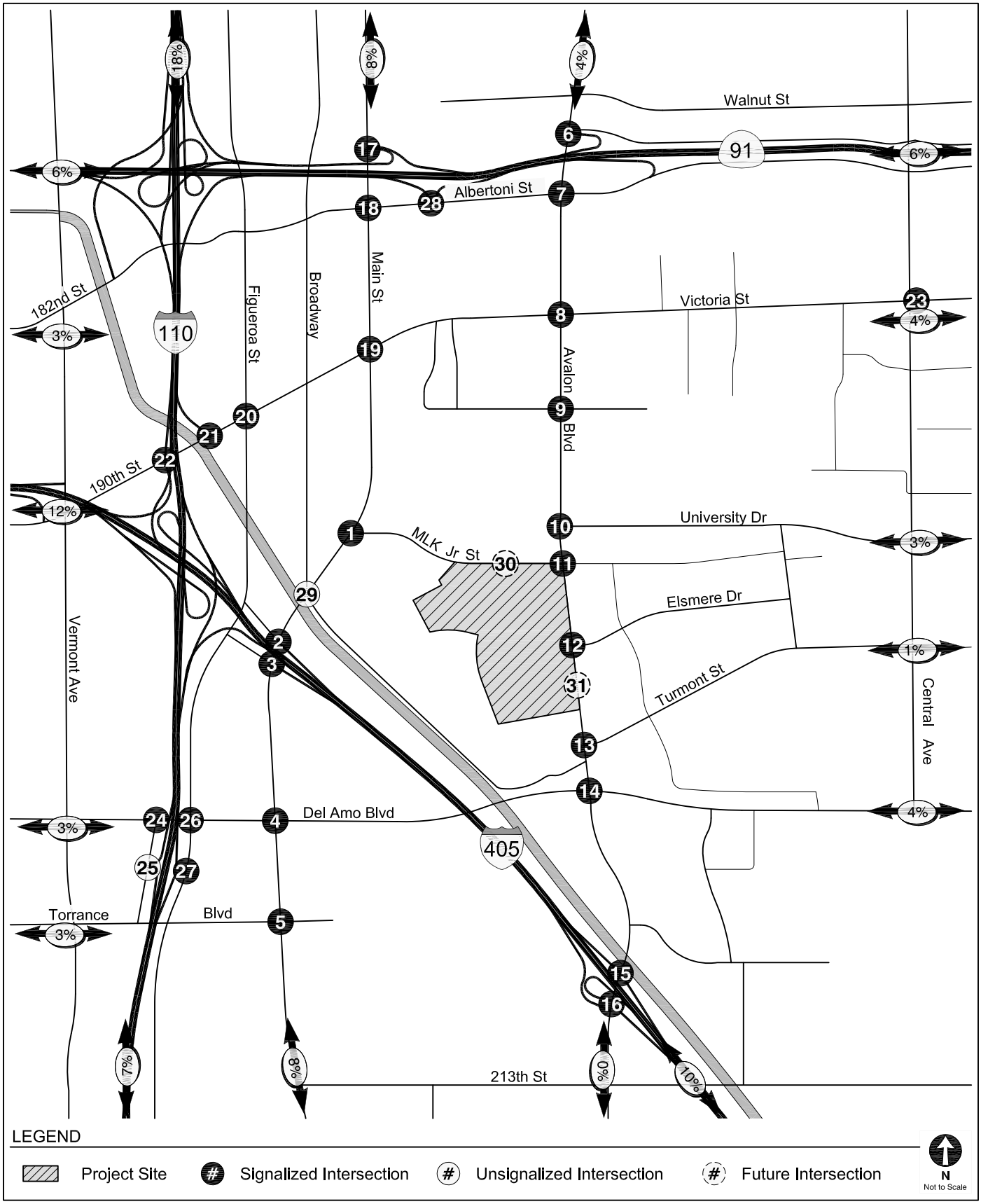
- 25% to/from the north (I-110, I-405, Main Street, Avalon Boulevard)
- 25% to/from the east (SR 91, Albertoni Street, Victoria Street)
- 25% to/from the south (I-110, I-405, Main Street, Avalon Boulevard)
- 25% to/from the west (190th Street, Del Amo Boulevard)

PROJECT TRIP ASSIGNMENT

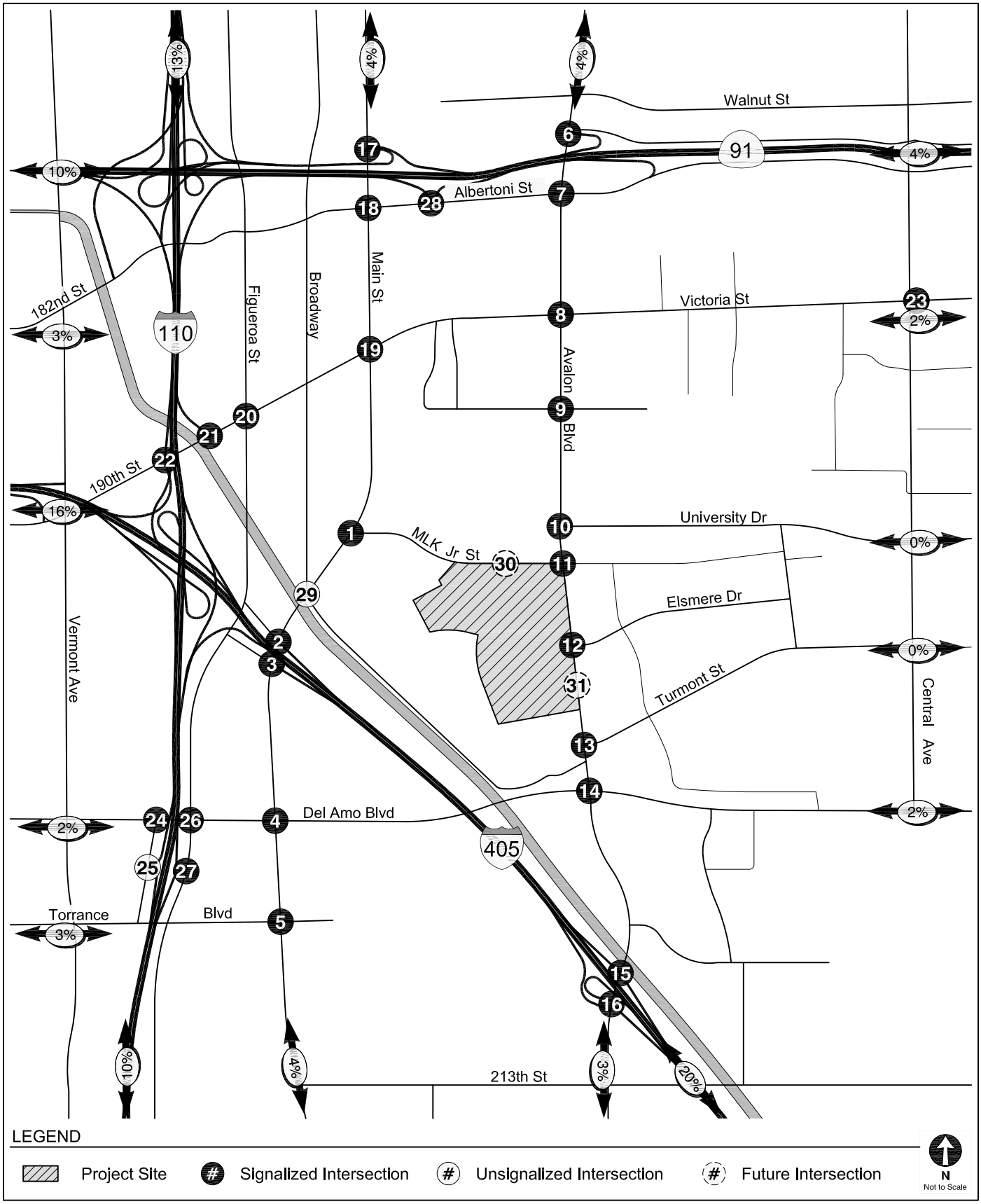
The Project trip generation estimates summarized in Table 6 and the trip distribution pattern shown in Figure 6A, 5B, and 5C were used to assign the Project-generated traffic through the study intersections. Figures 7A and 7B illustrate the combined Project-only traffic volumes at the study intersections during typical weekday morning and afternoon and Saturday peak hours.



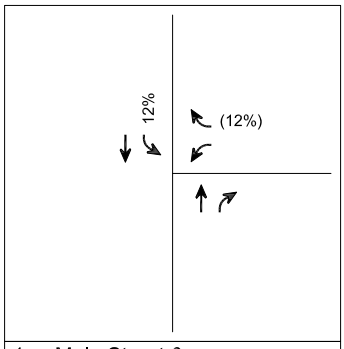
REGIONAL TRIP DISTRIBUTION WEEKDAY SOCCER	FIGURE 5A



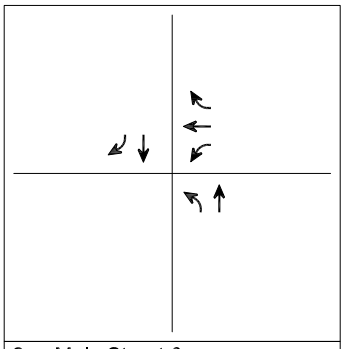
REGIONAL TRIP DISTRIBUTION WEEKDAY TENNIS / CENTER	FIGURE 5B



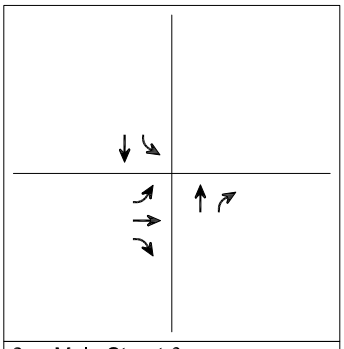
REGIONAL TRIP DISTRIBUTION WEEKEND	FIGURE 5C



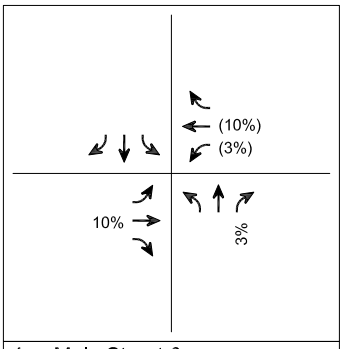
1. Main Street & MLK Jr Street



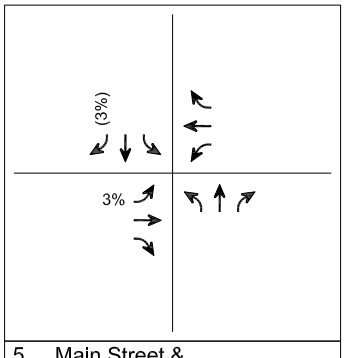
2. Main Street & I-405 NB Off-Ramp



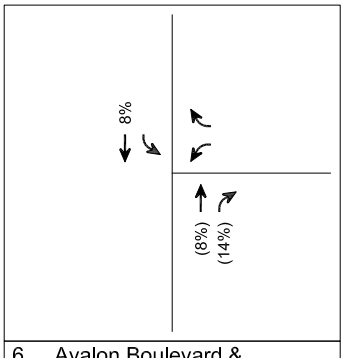
3. Main Street & I-405 SB On-Ramp



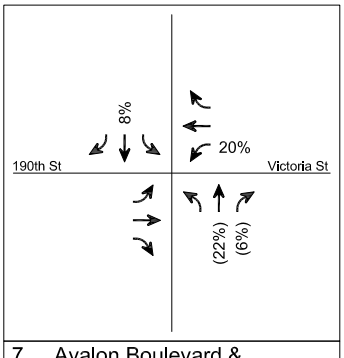
4. Main Street & Del Amo Boulevard



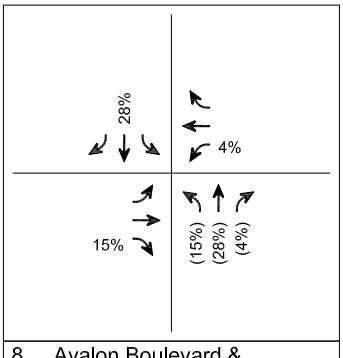
5. Main Street & Torrance Boulevard



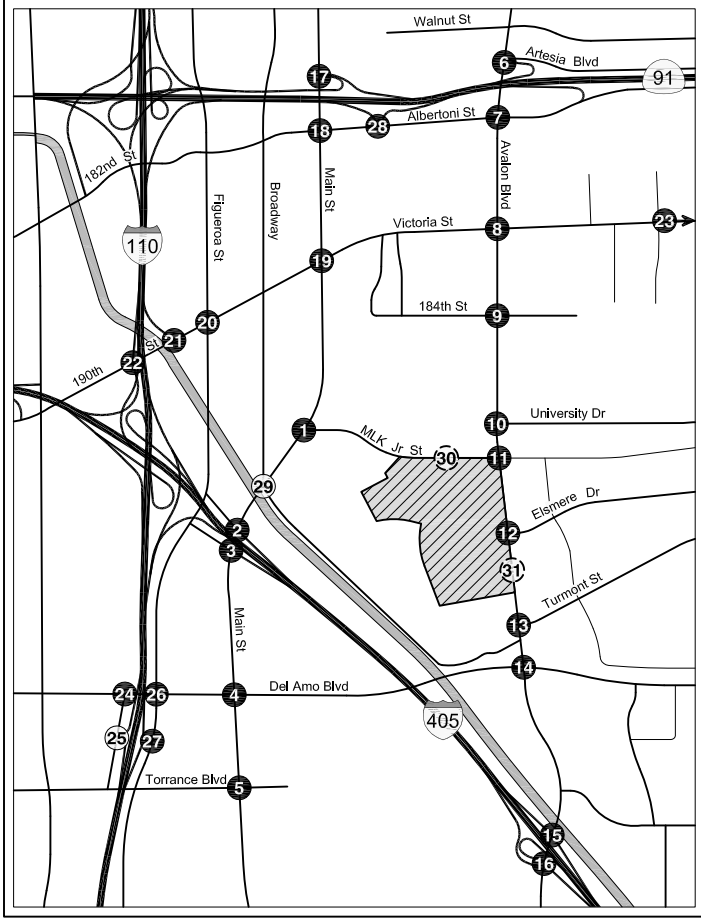
6. Avalon Boulevard & SR-91 WB On-Ramp

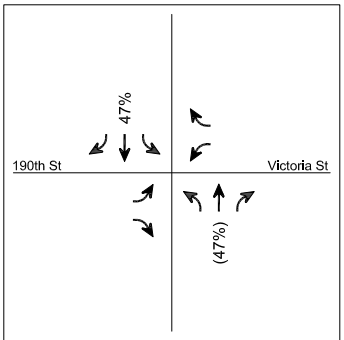


7. Avalon Boulevard & Albertoni Street

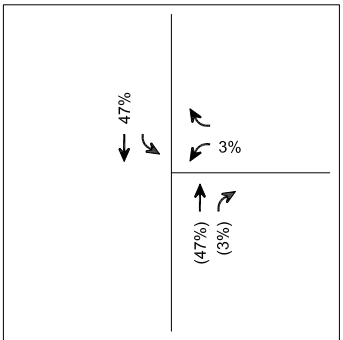


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

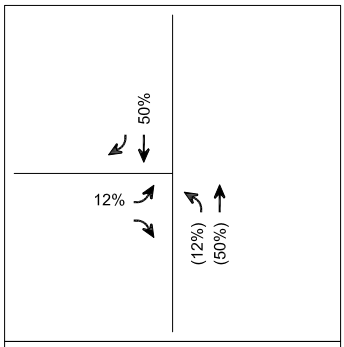
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

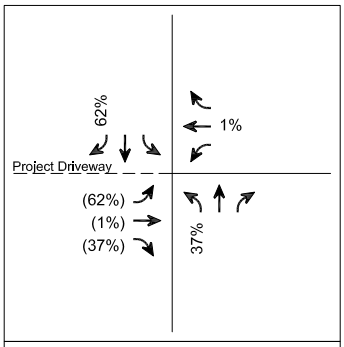
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY SOCCER

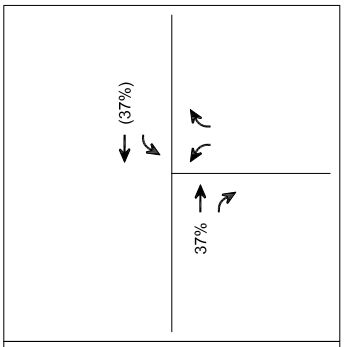
FIGURE 6A



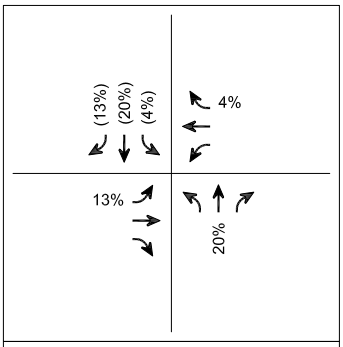
11. Avalon Boulevard & MLK Jr Street



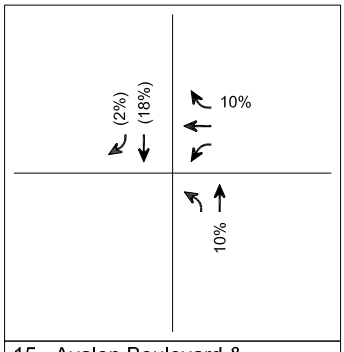
12. Avalon Boulevard & Elsmere Drive



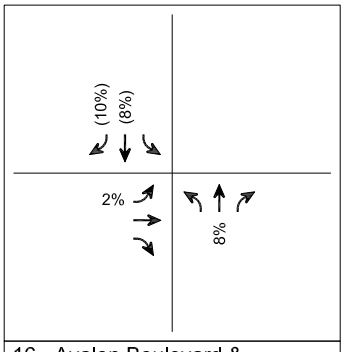
13. Avalon Boulevard & Turmont Street



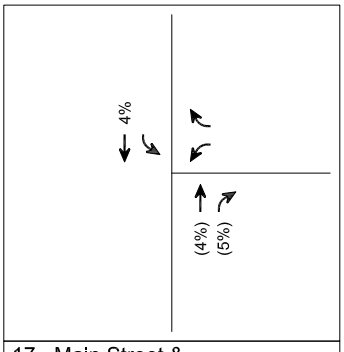
14. Avalon Boulevard & Del Amo Boulevard



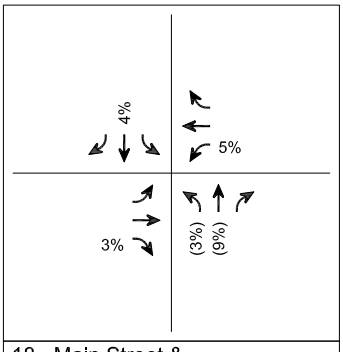
15. Avalon Boulevard & I-405 NB Ramps



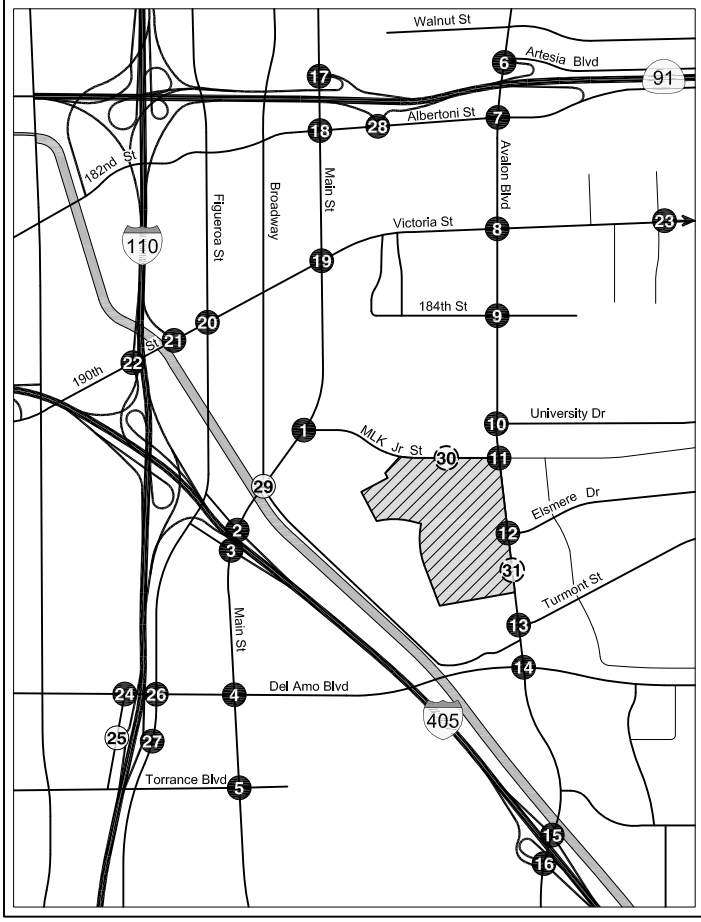
16. Avalon Boulevard & I-405 SB Ramps

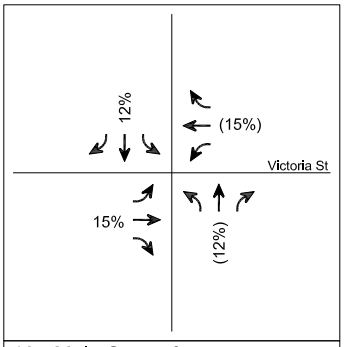


17. Main Street & SR-91 WB Ramps

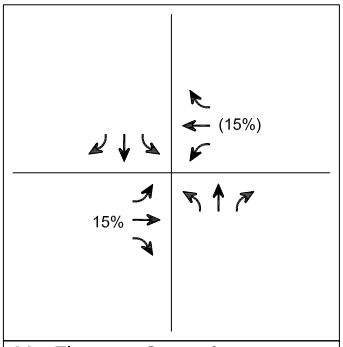


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

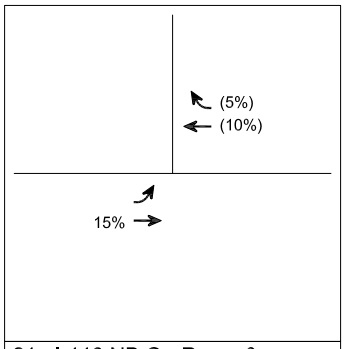
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

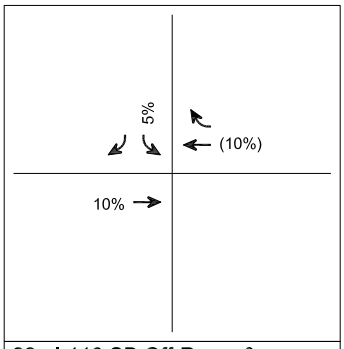
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY SOCCER

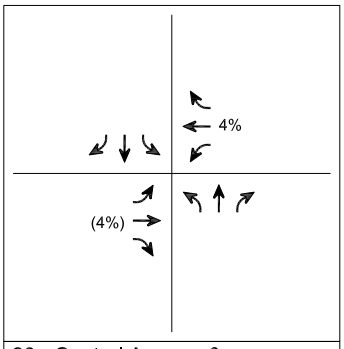
FIGURE
6A (CONT.)



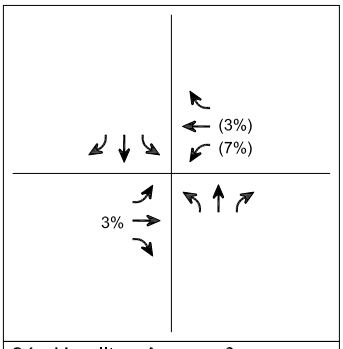
21. I-110 NB On-Ramp & 190th Street



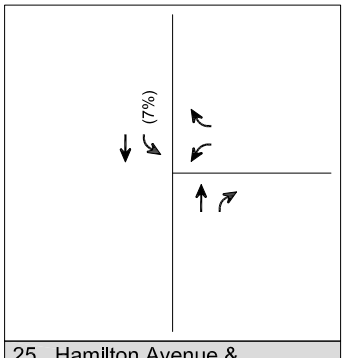
22. I-110 SB Off-Ramp & 190th Street



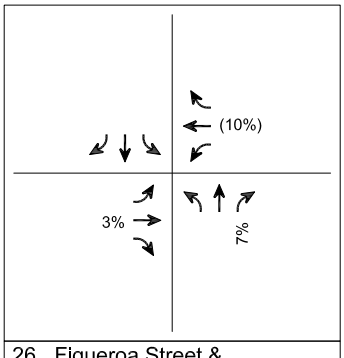
23. Central Avenue & Victoria Street



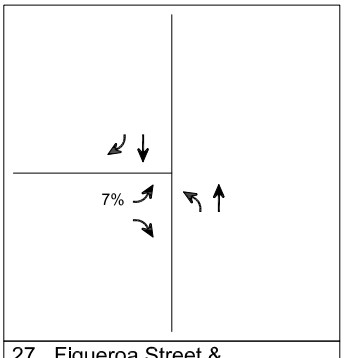
24. Hamilton Avenue & Del Amo Boulevard



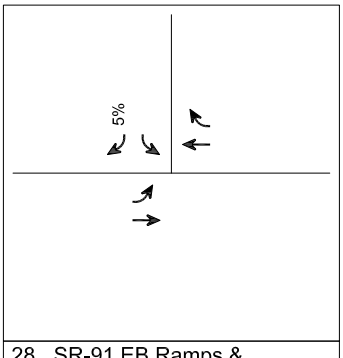
25. Hamilton Avenue & I-110 SB Ramps



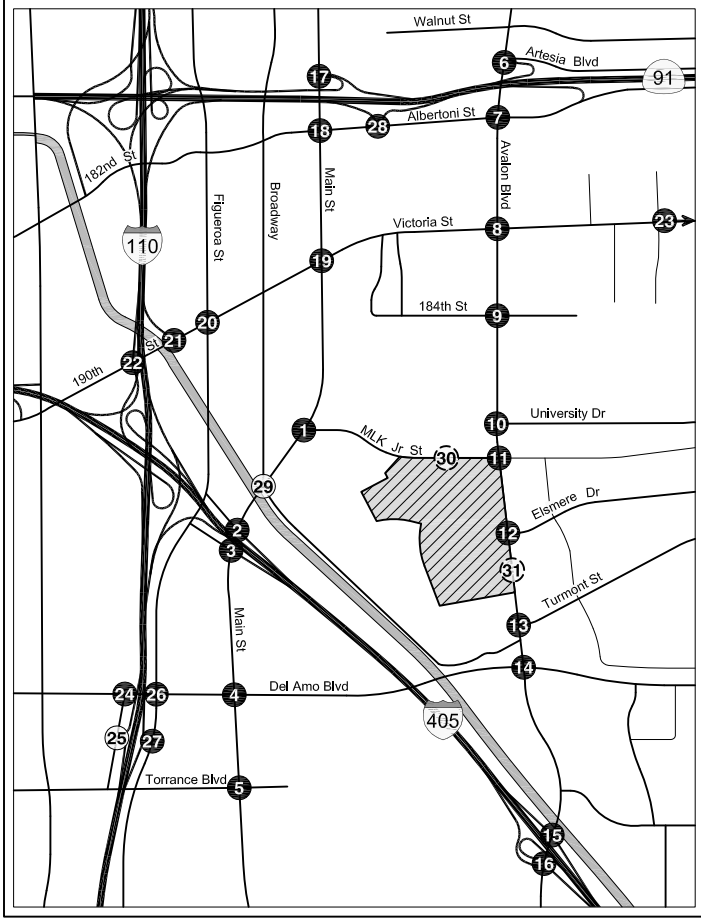
26. Figueroa Street & Del Amo Boulevard

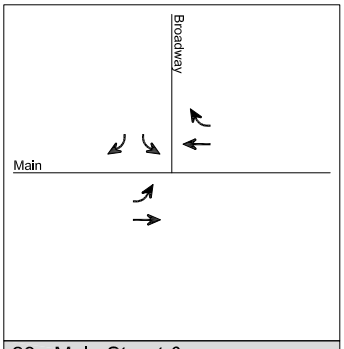


27. Figueroa Street & I-110 NB Ramps

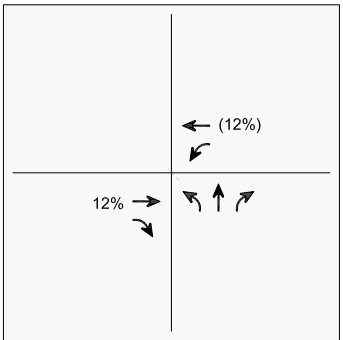


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

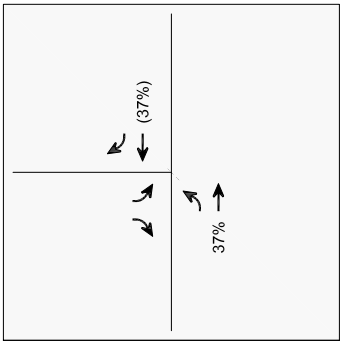


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

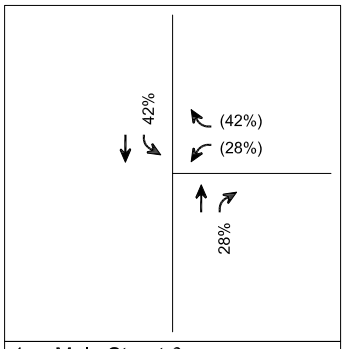
- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage



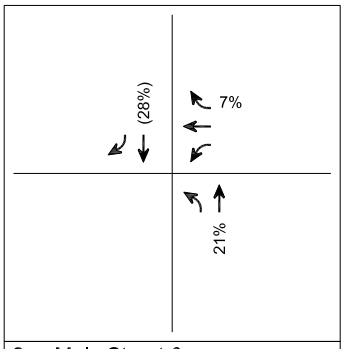
31. Avalon Boulevard & New Driveway

PROJECT TRIP DISTRIBUTION
WEEKDAY SOCCER

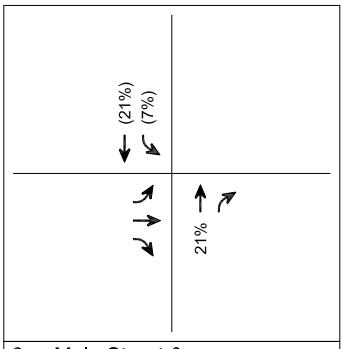
FIGURE
6A (CONT.)



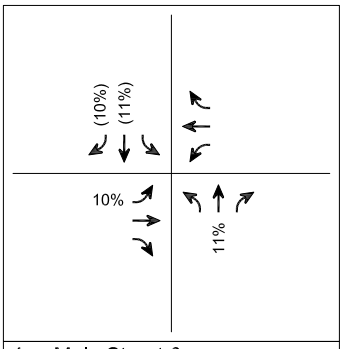
1. Main Street & MLK Jr Street



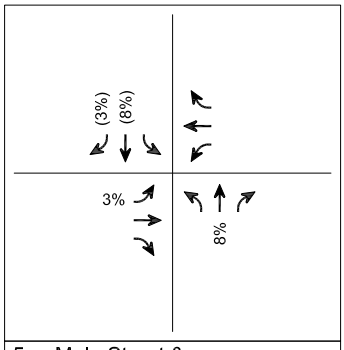
2. Main Street & I-405 NB Off-Ramp



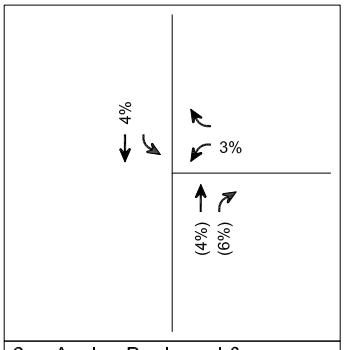
3. Main Street & I-405 SB On-Ramp



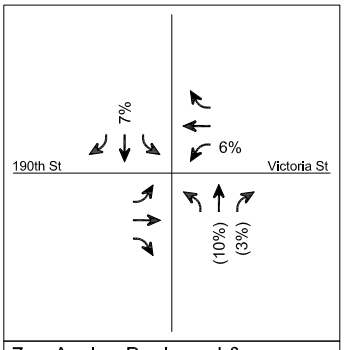
4. Main Street & Del Amo Boulevard



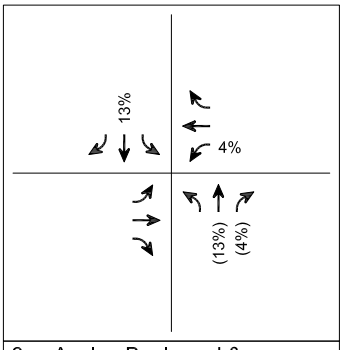
5. Main Street & Torrance Boulevard



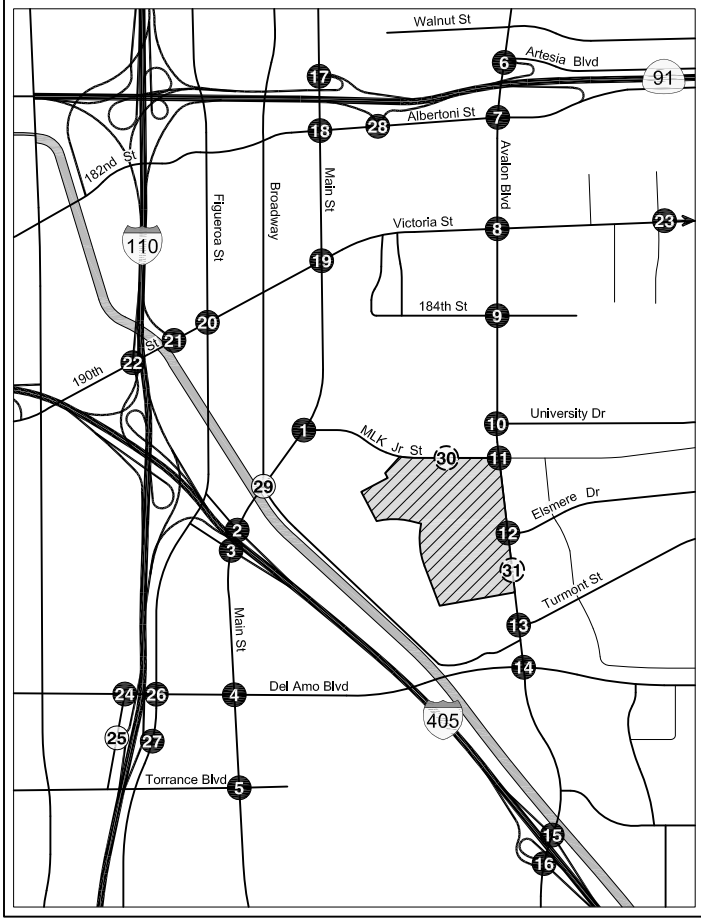
6. Avalon Boulevard & SR-91 WB On-Ramp

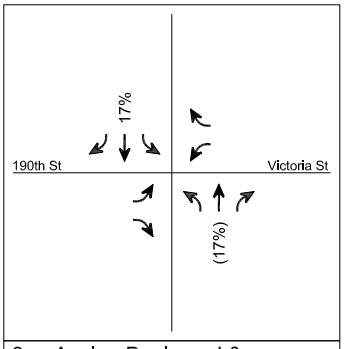


7. Avalon Boulevard & Albertoni Street

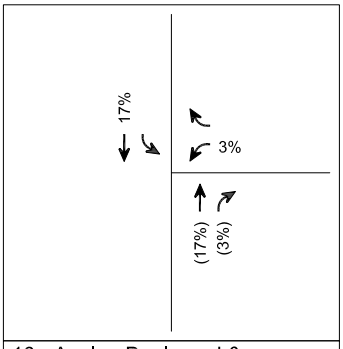


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

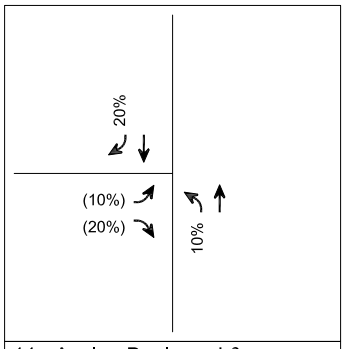
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

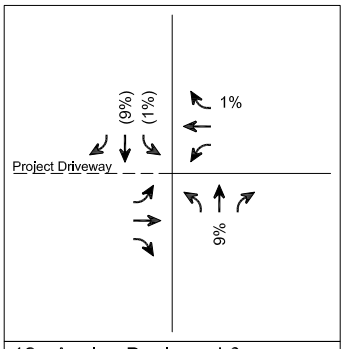
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY NON-SOCCER

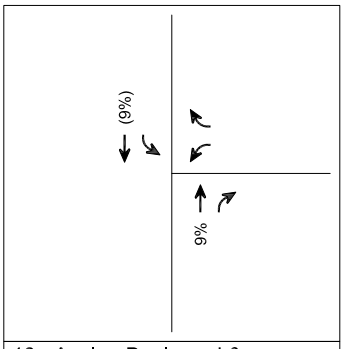
FIGURE 6B



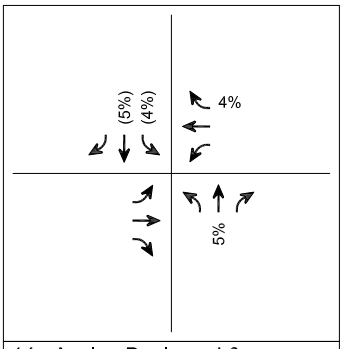
11. Avalon Boulevard & MLK Jr Street



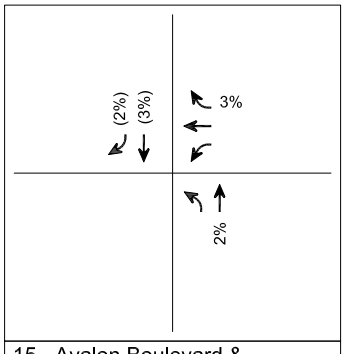
12. Avalon Boulevard & Elsmere Drive



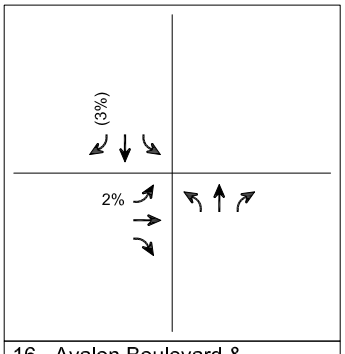
13. Avalon Boulevard & Turmont Street



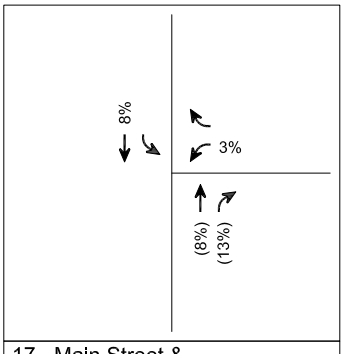
14. Avalon Boulevard & Del Amo Boulevard



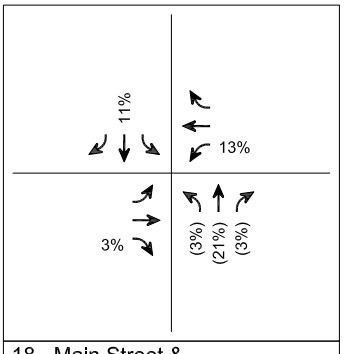
15. Avalon Boulevard & I-405 NB Ramps



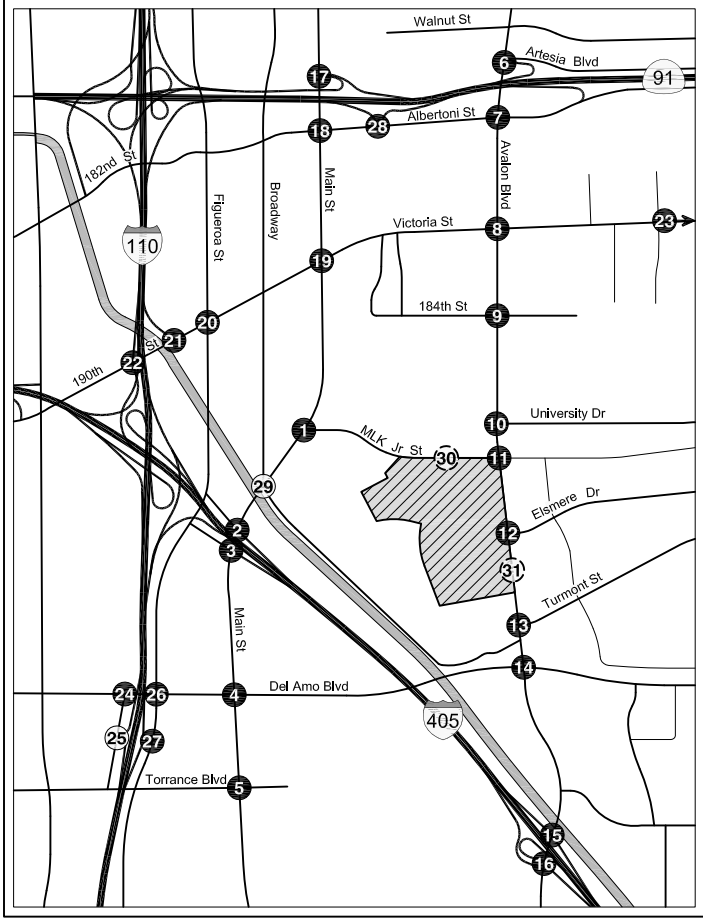
16. Avalon Boulevard & I-405 SB Ramps

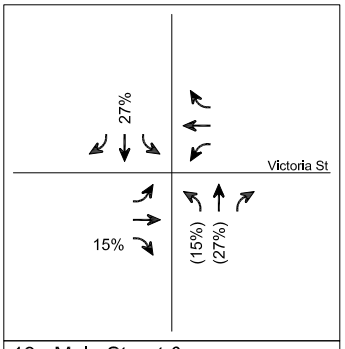


17. Main Street & SR-91 WB Ramps

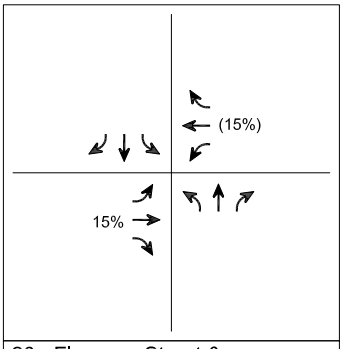


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

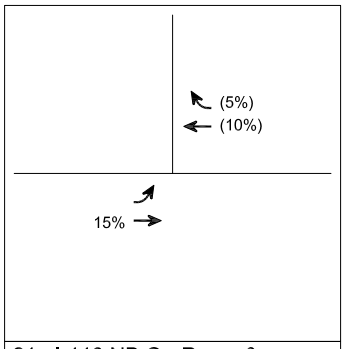
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

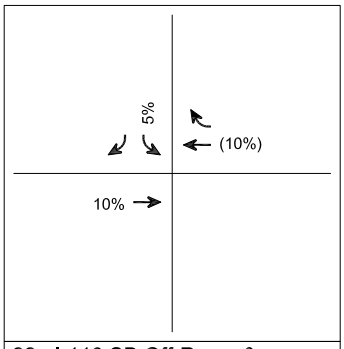
N
Not to Scale

PROJECT TRIP DISTRIBUTION
WEEKDAY NON-SOCCER

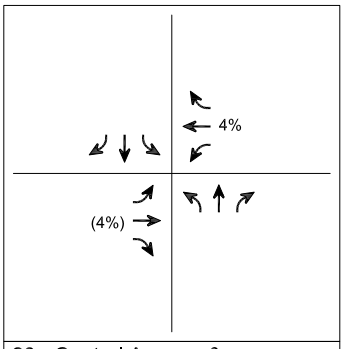
FIGURE
6B (CONT.)



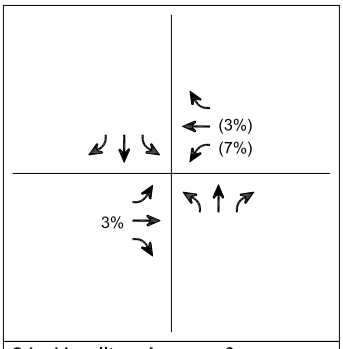
21. I-110 NB On-Ramp & 190th Street



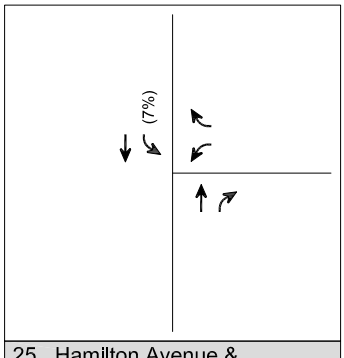
22. I-110 SB Off-Ramp & 190th Street



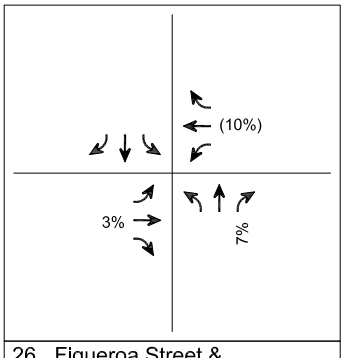
23. Central Avenue & Victoria Street



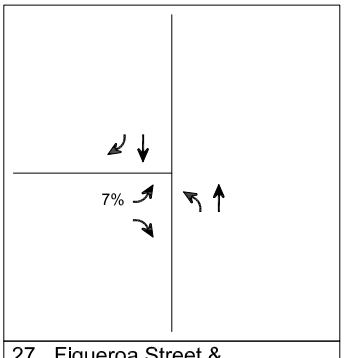
24. Hamilton Avenue & Del Amo Boulevard



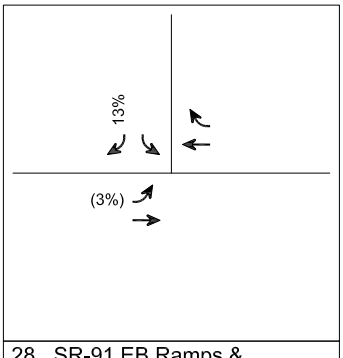
25. Hamilton Avenue & I-110 SB Ramps



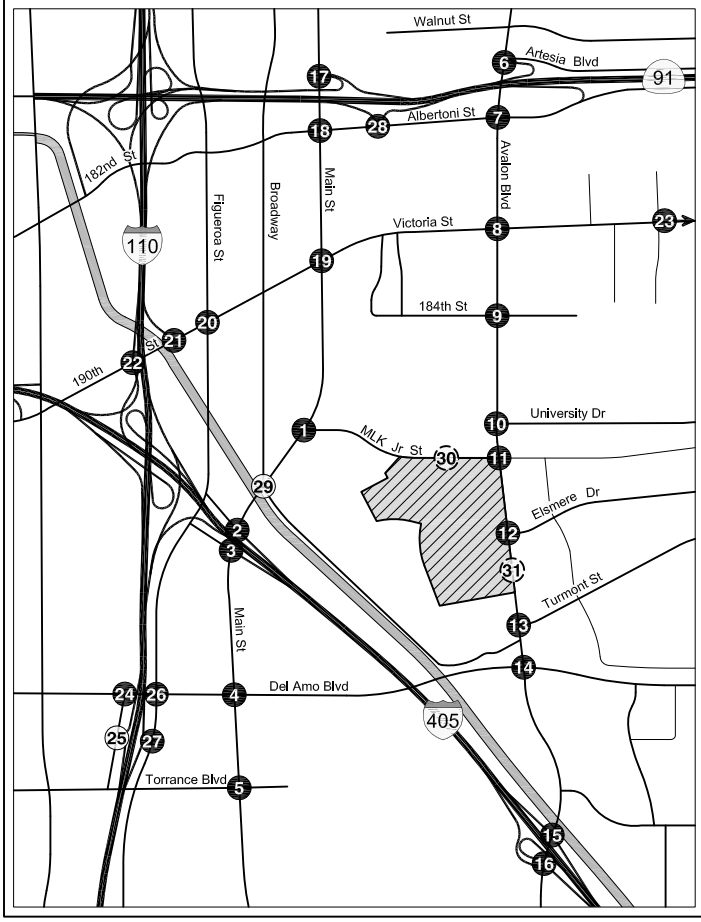
26. Figueroa Street & Del Amo Boulevard

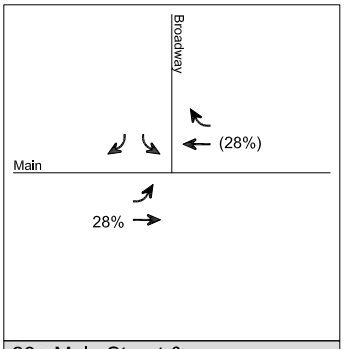


27. Figueroa Street & I-110 NB Ramps

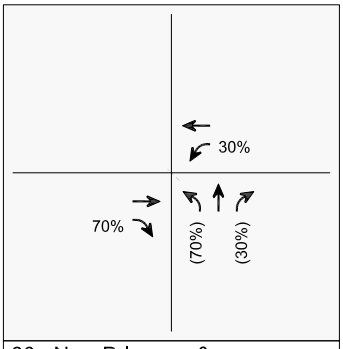


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

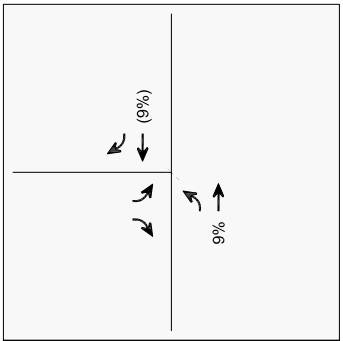


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

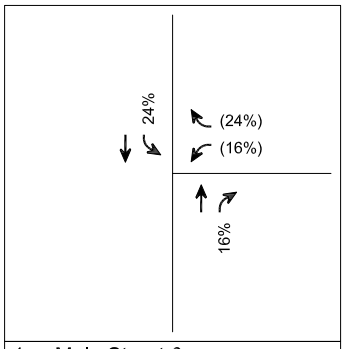
- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- %(%) Inbound(Outbound) Trip Percentage



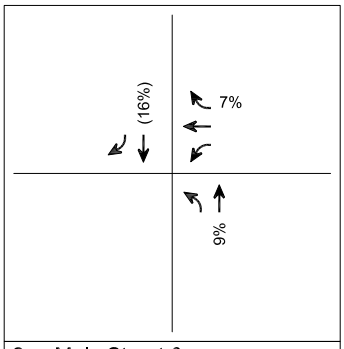
31. Avalon Boulevard & New Driveway

PROJECT TRIP DISTRIBUTION
WEEKDAY NON-SOCCER

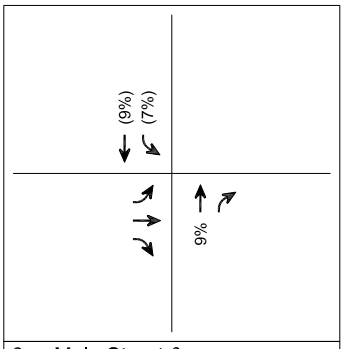
FIGURE
6B (CONT.)



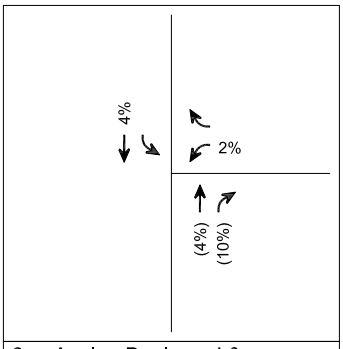
1. Main Street & MLK Jr Street



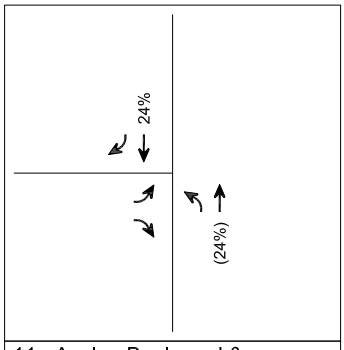
2. Main Street & I-405 NB Off-Ramp



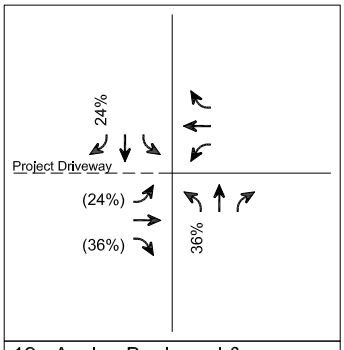
3. Main Street & I-405 SB On-Ramp



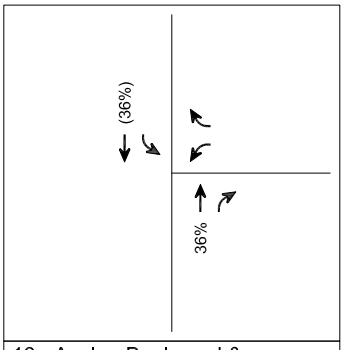
6. Avalon Boulevard & SR-91 WB On-Ramp



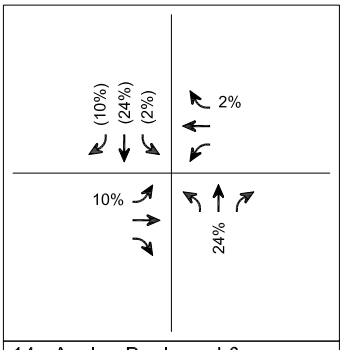
11. Avalon Boulevard & MLK Jr Street



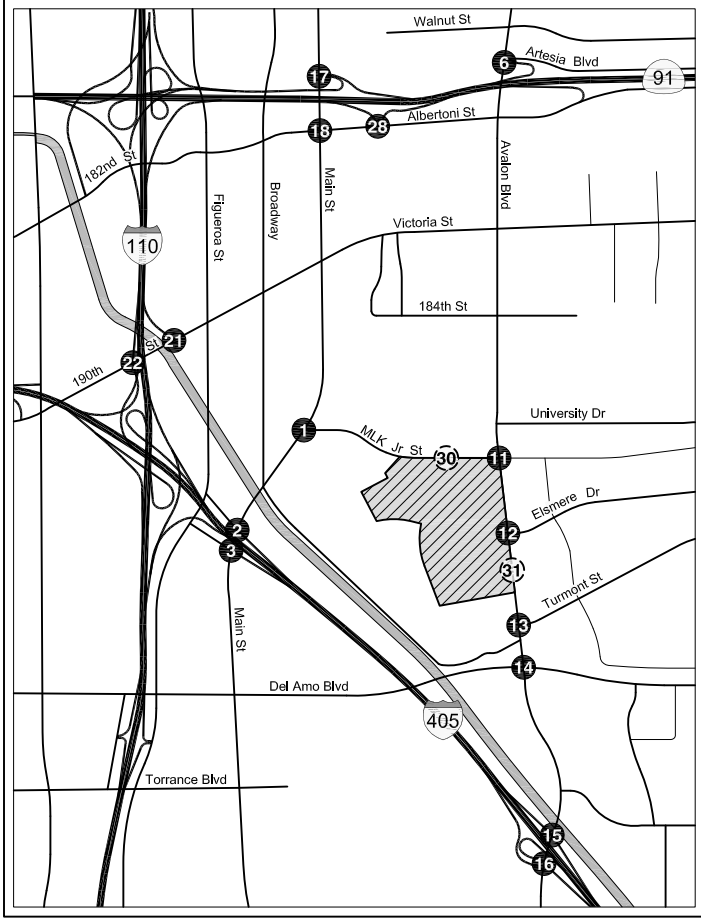
12. Avalon Boulevard & Elsmere Drive

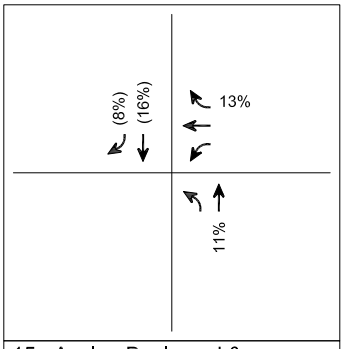


13. Avalon Boulevard & Turmont Street

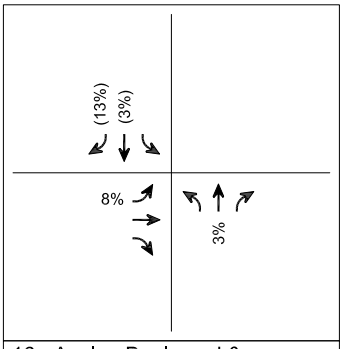


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

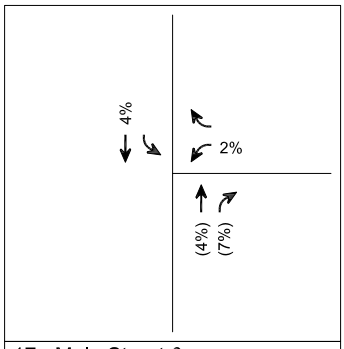
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

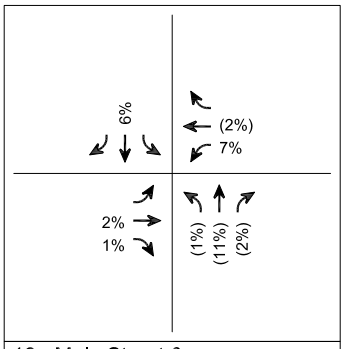
N
Not to Scale

PROJECT TRIP DISTRIBUTION
SATURDAY

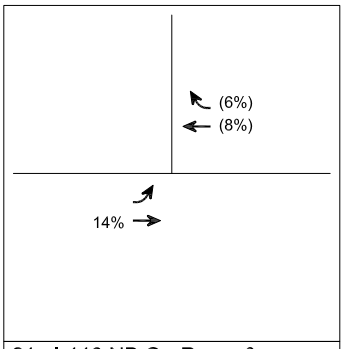
FIGURE
6C



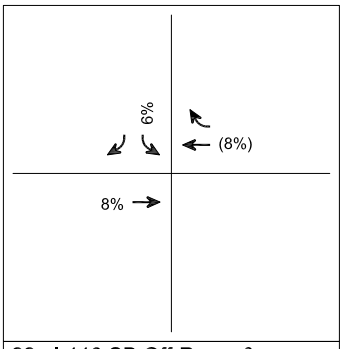
17. Main Street & SR-91 WB Ramps



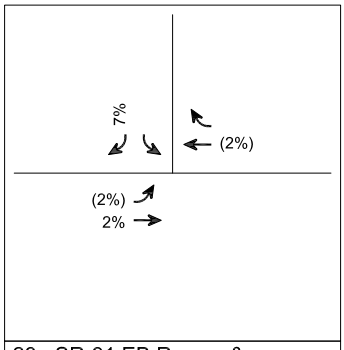
18. Main Street & Albertoni Street



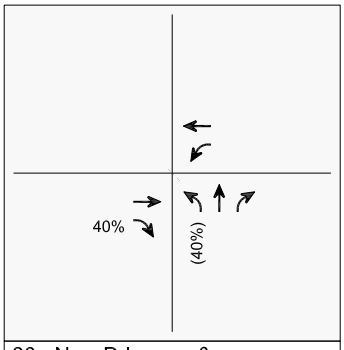
21. I-110 NB On-Ramp & 190th Street



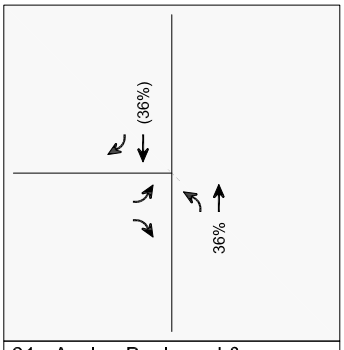
22. I-110 SB Off-Ramp & 190th Street



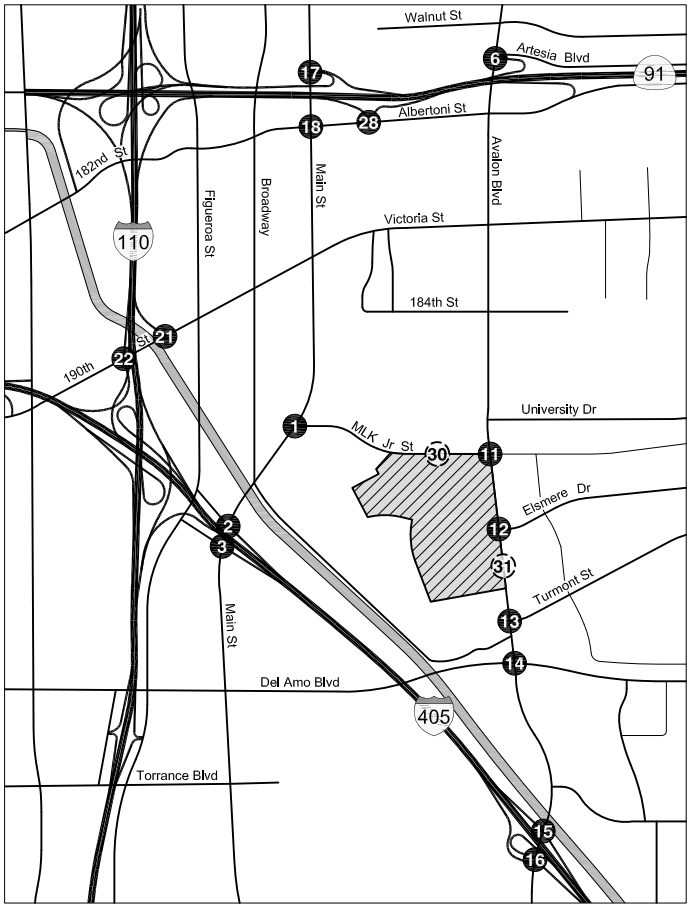
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



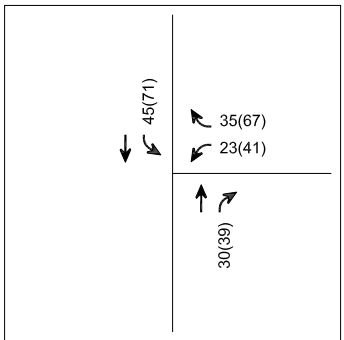
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- %(%) Inbound(Outbound) Trip Percentage

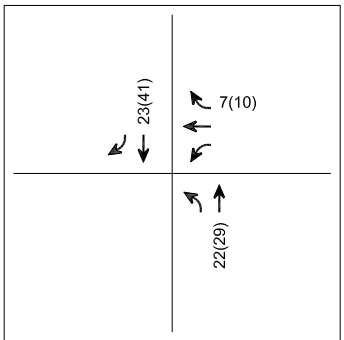
N
Not to Scale

PROJECT TRIP DISTRIBUTION
SATURDAY

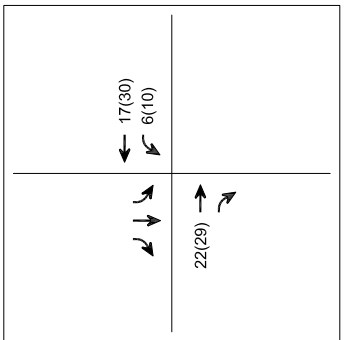
FIGURE
6C (CONT.)



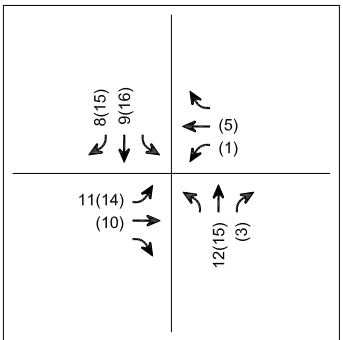
1. Main Street & MLK Jr Street



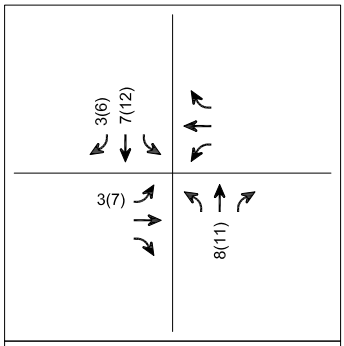
2. Main Street & I-405 NB Off-Ramp



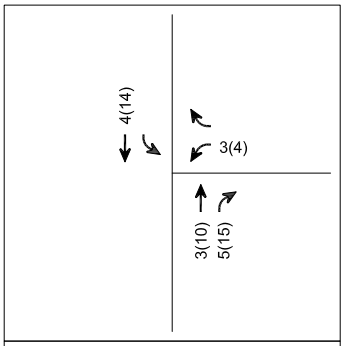
3. Main Street & I-405 SB On-Ramp



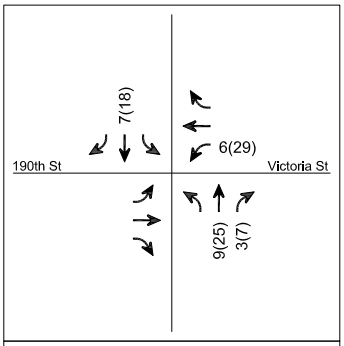
4. Main Street & Del Amo Boulevard



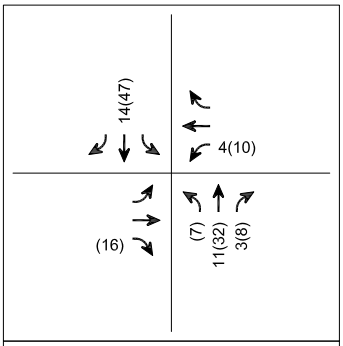
5. Main Street & Torrance Boulevard



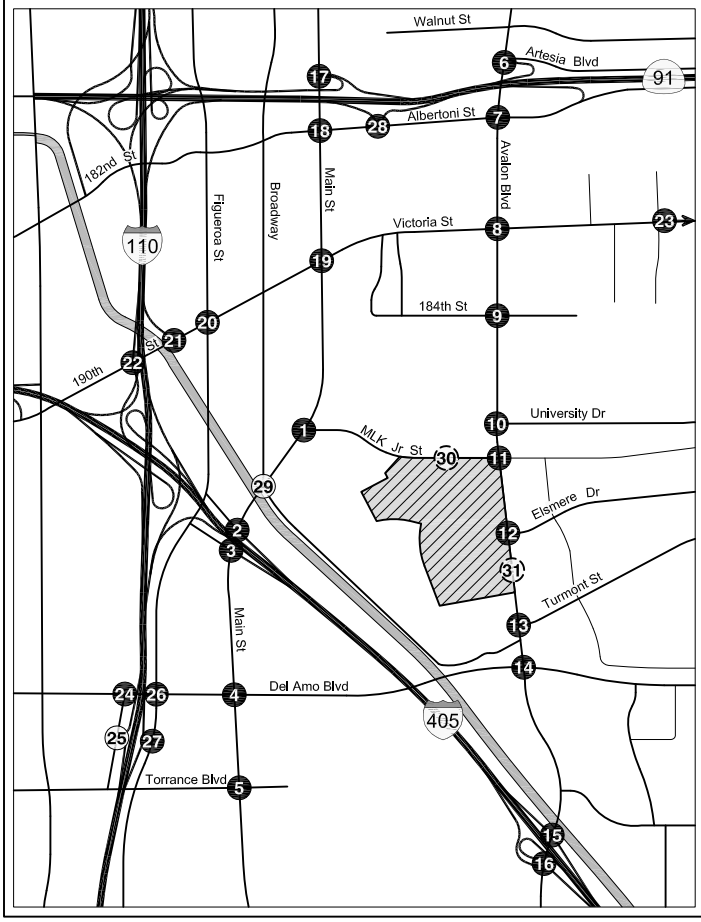
6. Avalon Boulevard & SR-91 WB On-Ramp

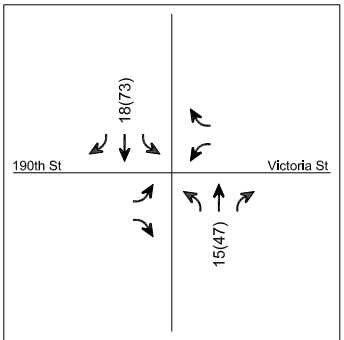


7. Avalon Boulevard & Albertoni Street

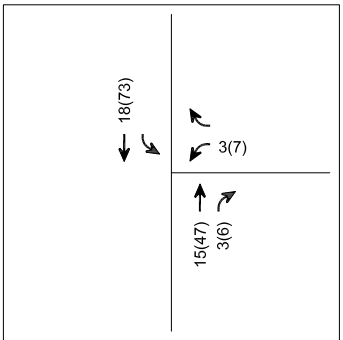


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

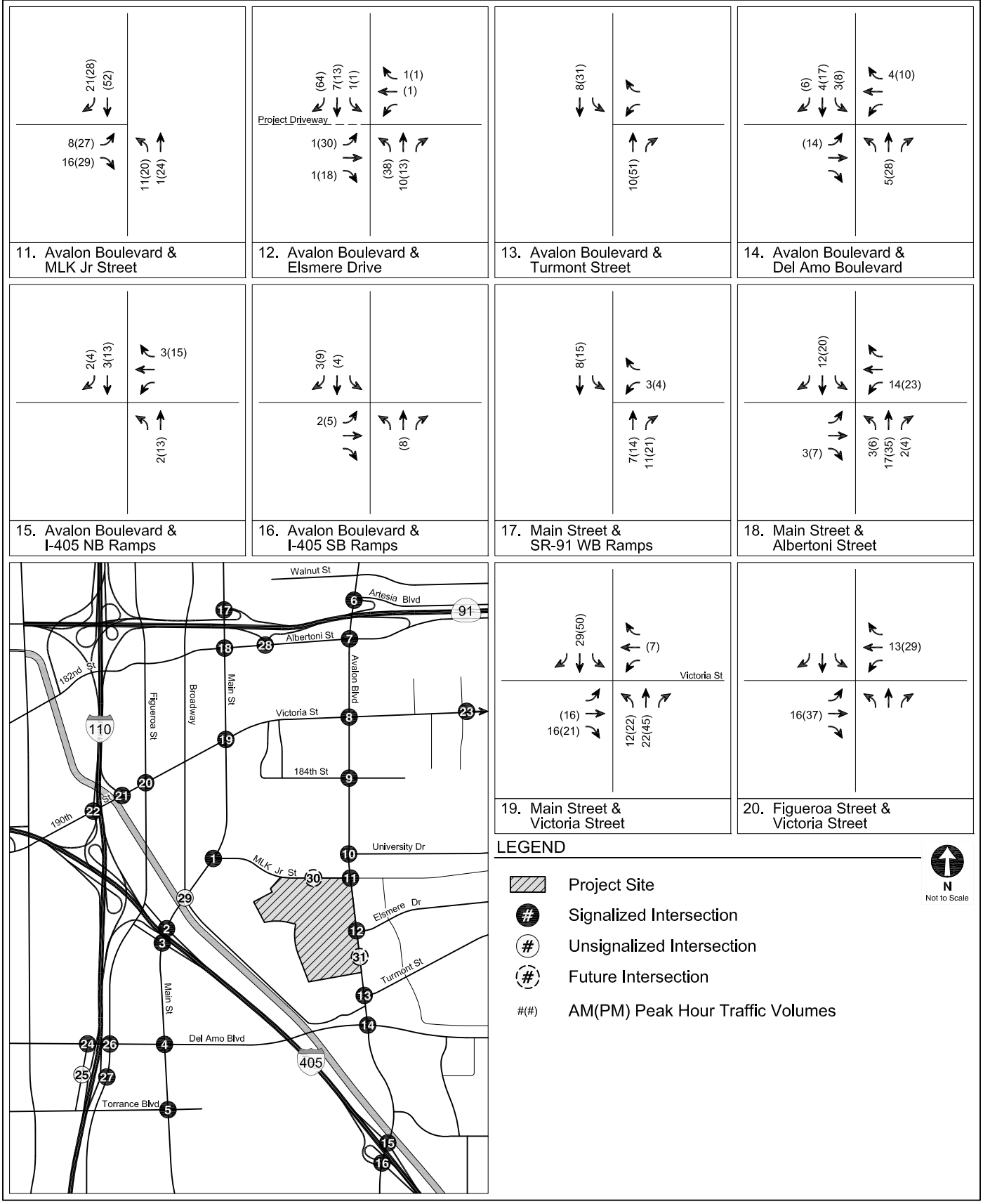
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

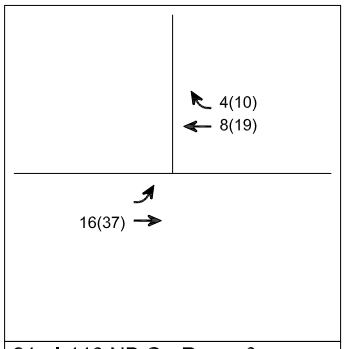
PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
7A

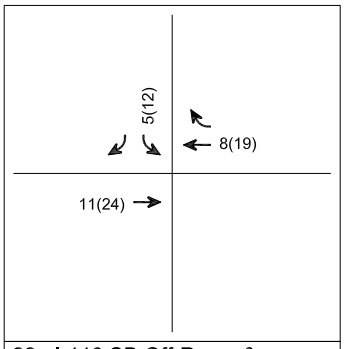


PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

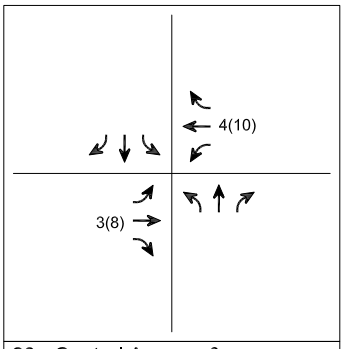
FIGURE
7A (CONT.)



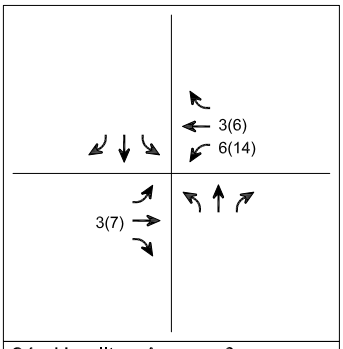
21. I-110 NB On-Ramp & 190th Street



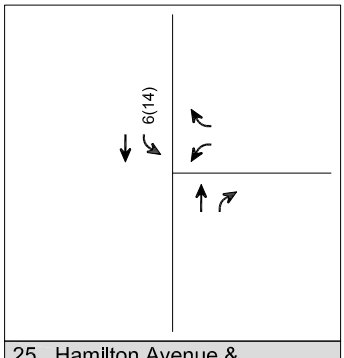
22. I-110 SB Off-Ramp & 190th Street



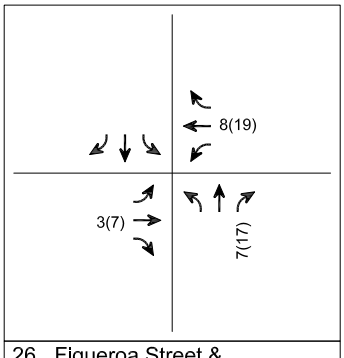
23. Central Avenue & Victoria Street



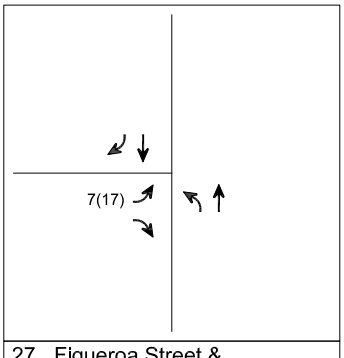
24. Hamilton Avenue & Del Amo Boulevard



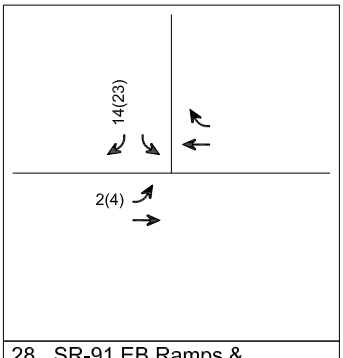
25. Hamilton Avenue & I-110 SB Ramps



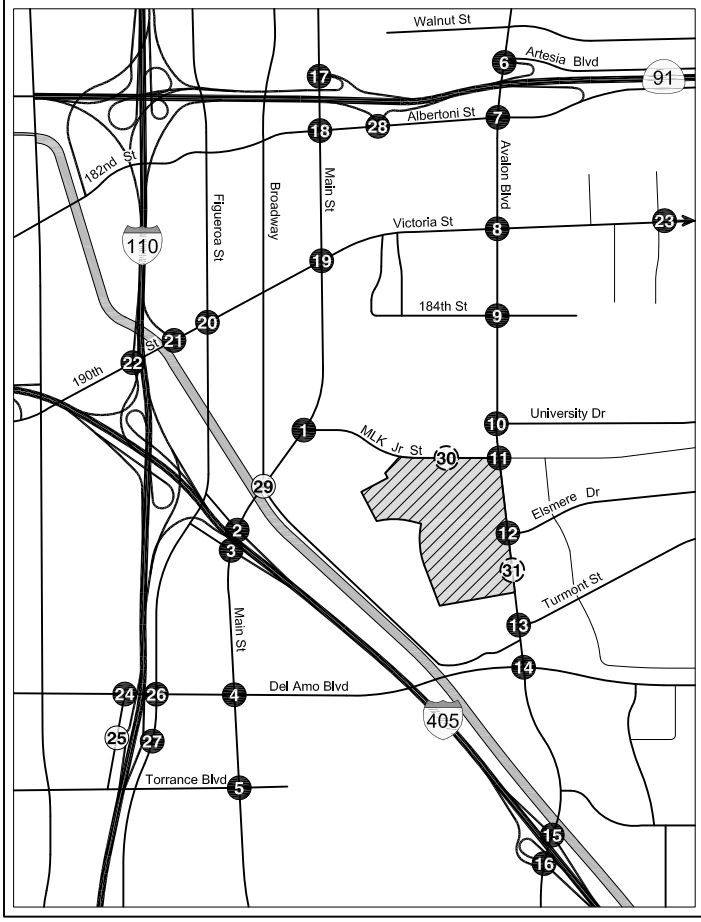
26. Figueroa Street & Del Amo Boulevard

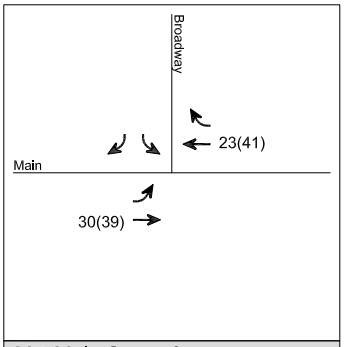


27. Figueroa Street & I-110 NB Ramps

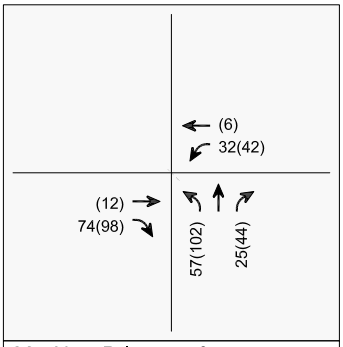


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

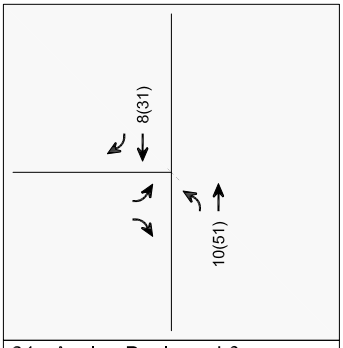


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

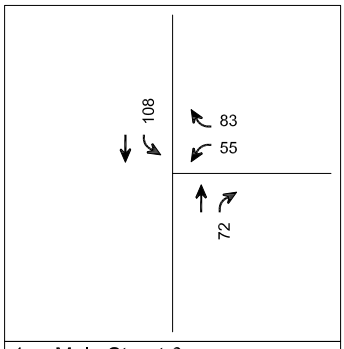
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes



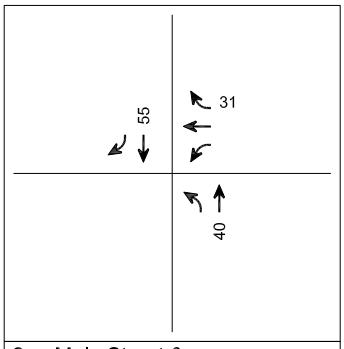
31. Avalon Boulevard & New Driveway

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

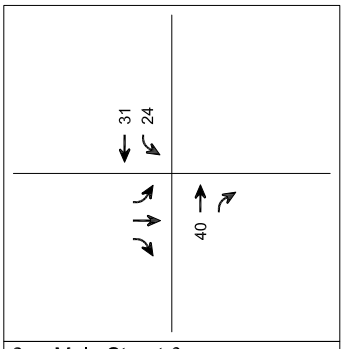
FIGURE
7A (CONT.)



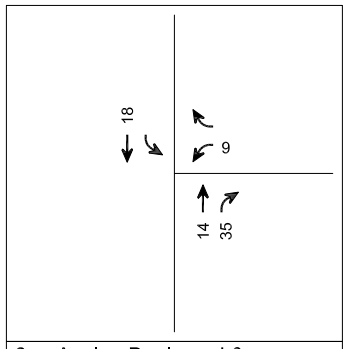
1. Main Street & MLK Jr Street



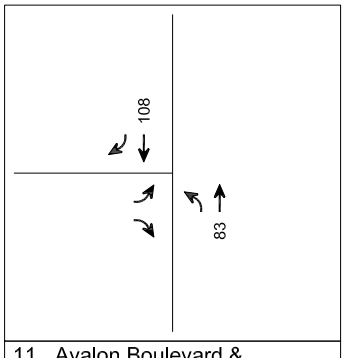
2. Main Street & I-405 NB Off-Ramp



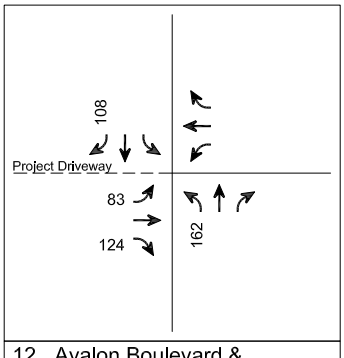
3. Main Street & I-405 SB On-Ramp



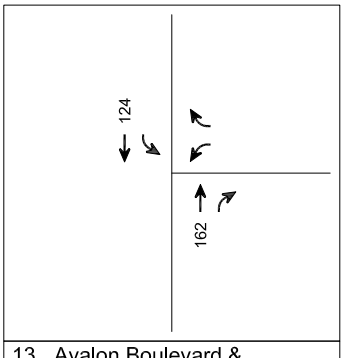
6. Avalon Boulevard & SR-91 WB On-Ramp



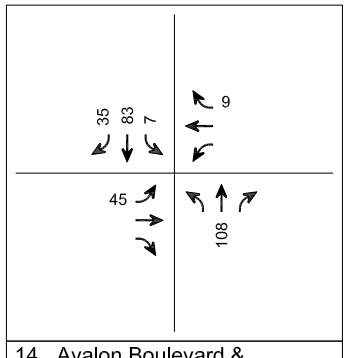
11. Avalon Boulevard & MLK Jr Street



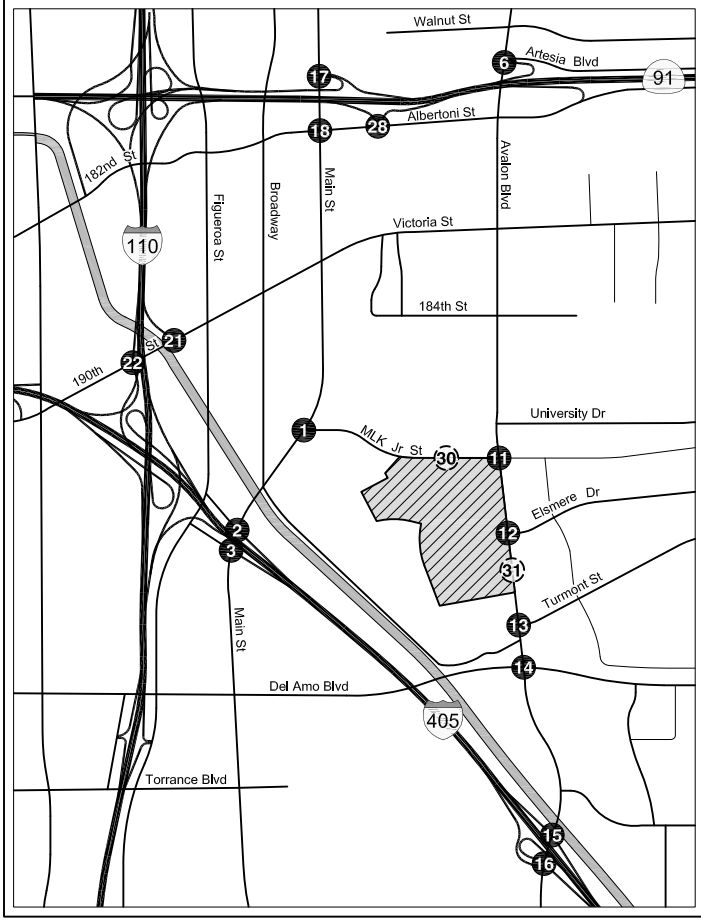
12. Avalon Boulevard & Elsmere Drive

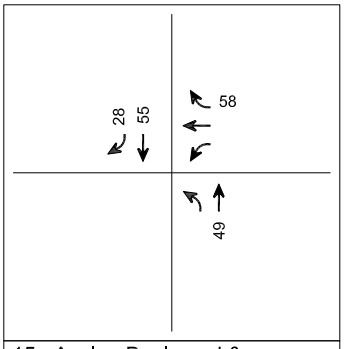


13. Avalon Boulevard & Turmont Street

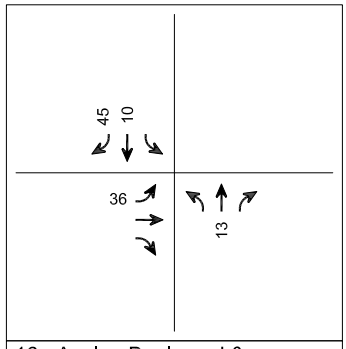


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

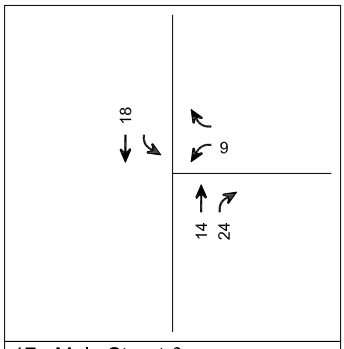
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

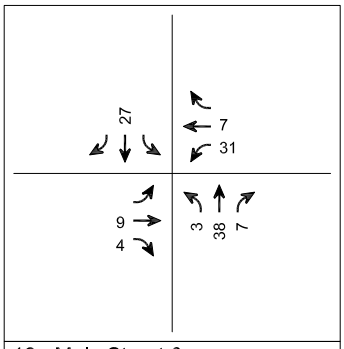
N
Not to Scale

PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

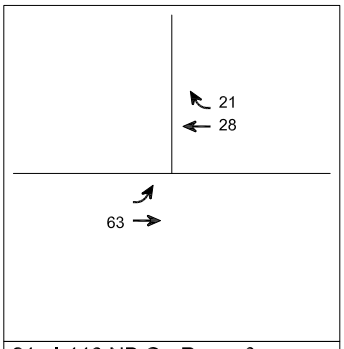
FIGURE 7B



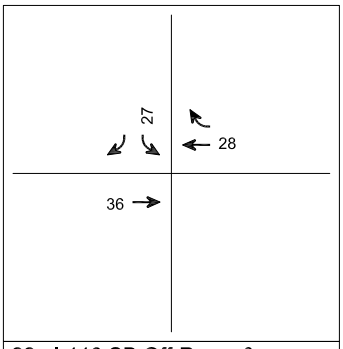
17. Main Street & SR-91 WB Ramps



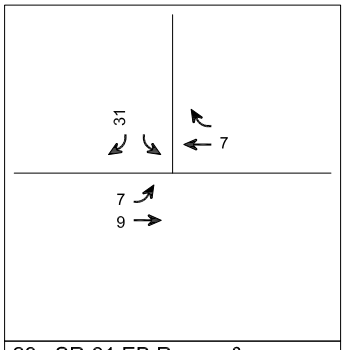
18. Main Street & Albertoni Street



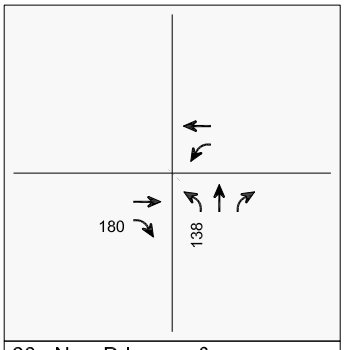
21. I-110 NB On-Ramp & 190th Street



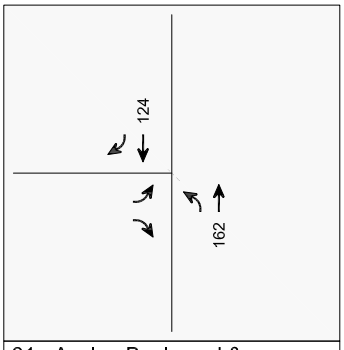
22. I-110 SB Off-Ramp & 190th Street



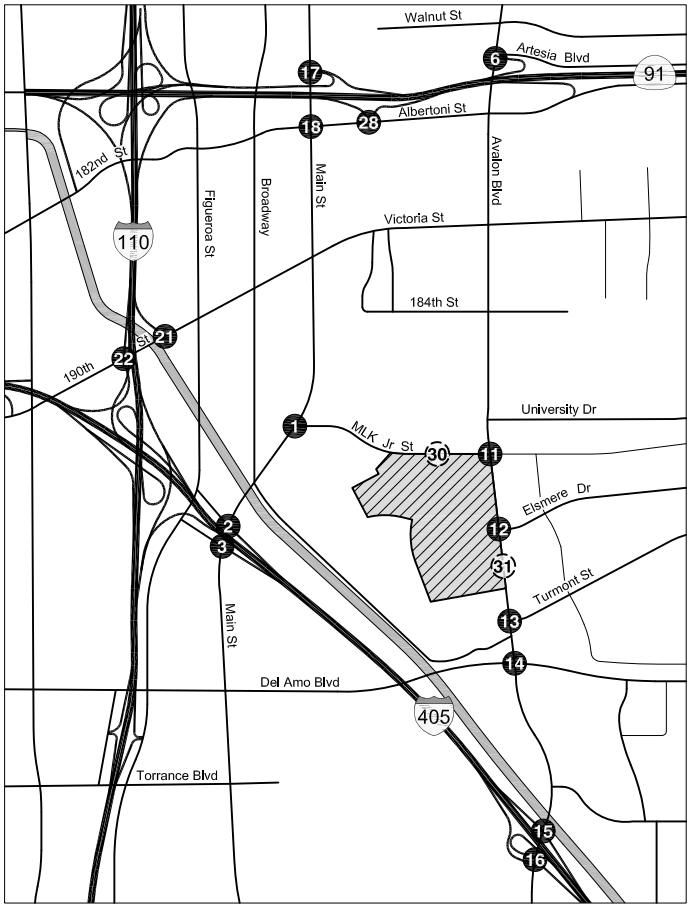
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

N
Not to Scale

PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
7B (CONT.)

TABLE 6
PROJECT TRIP GENERATION ESTIMATES

TRIP GENERATION RATES [a]													
Land Use	ITE Land Use	Rate	Weekday							Weekend			
			Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
				In	Out	Total	In	Out	Total		In	Out	Total
Golf Course [b]	430	per acre	3.74	74%	26%	0.19	34%	66%	0.28	5.82	52%	48%	0.64
General Office Building	710	per ksf	9.74	86%	15%	1.16	16%	84%	1.15	2.21	54%	46%	0.53
Soccer Complex [c]	488	per field	71.33	61%	39%	0.99	66%	34%	16.43	430	59%	41%	54
Recreational Community Center [d]	495	per ksf	28.82	66%	34%	1.76	47%	53%	2.31	9.1	54%	46%	1.07
Tennis Courts [e]	490	per court	30.32	50%	50%	1.67	50%	50%	3.67	27.83	50%	50%	3
Skatepark [f]	[d]	per ksf	9.1	53%	47%	0.3	50%	50%	1.36	16.61	53%	47%	1.86

TRIP GENERATION ESTIMATES												
Land Use	Size	Weekday							Weekend			
		Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
			In	Out	Total	In	Out	Total		In	Out	Total
Existing Uses												
Victoria Golf Course	87 Acres	325	12	5	17	8	16	24	506	29	27	56
Subtotal - Existing Uses		***325***	***12***	***5***	***17***	***8***	***16***	***24***	***506***	***29***	***27***	***56***
Proposed Project												
Soccer Complex - ITE Rates / Emprirical	10 fields	713	6	4	10	108	56	164	4,300	319	221	540
Skatepark	43,560 sf	396	7	6	13	30	29	59	724	43	38	81
Tennis Complex [g]	62 courts	1,880	55	54	109	72	71	143	1,725	93	93	186
League Administration Building	5,000 sf	49	5	1	6	1	5	6	11	1	2	3
Learning Center/Development Facility [h]	38,000 sf	1,095	44	23	67	41	47	88	346	22	19	41
Subtotal - Proposed Project		**4,133**	**117**	**88**	**205**	**252**	**208**	**460**	**7,106**	**478**	**373**	**851**
TOTAL NET NEW PROJECT TRIPS		**3,808**	**105**	**83**	**188**	**244**	**192**	**436**	**6,600**	**449**	**346**	**795**

Notes:
[a] Trip generation rates, unless otherwise noted, are from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017.
[b] Weekend trip generation rates for gold course use *Trip Generation, 9th Edition,* Institute of Transportation Engineers, 2012.
[c] Weekday trip generation rates for Land Use 488: Soccer Complex from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017. Weekend trip generation rates based on emperical data taken at Placer Valley Sports Complex, 2015.
[d] Learning center and development facility trips based on ITE Land Use 495 (Recreational Community Center).
[e] Trip generation Rates based on *Trip Generation, 9th Edition* , Institute of Transportation Engineers, 2012. Assumes Weekday AM and PM peak hours have 50% directional distribution.
[f] Trip generation rates from Center Avenue Skatepark found in the City of Huntington Beach Center Avenue Skatepark TIA, published December 2011. Weekend Daily trips were determined based on the ratio of weekday afternoon peak hour trips to weekday daily trips.
[g] Includes Exhabition Court, Spectator Venue, and Tennis Center Courts.
[h] The Learning Center is anticipated to operate based on a fixed number of daily sessions with students primarily transported by bus.

Chapter 4
Existing with Project Conditions

This chapter describes the results of the analysis of intersection operating conditions associated with the Project when compared to Existing Conditions. The analysis corresponds with the Existing Conditions data and analysis presented in Chapter 2. The Existing with Project Conditions are defined by the traffic volumes, roadways, and intersection configurations that existed at the time of the NOP.

EXISTING WITH PROJECT TRAFFIC VOLUMES

Consistent with the LACDPW analysis guidelines for Project impact analysis, the Project-only weekday morning, weekday midday, weekday afternoon, and Saturday midday peak hour traffic volumes described in Chapter 3 and shown in Figures 7A and 7B were added to the Existing weekday morning and afternoon and Saturday midday peak hour traffic volumes shown in Figures 4A and 4B.

The resulting volumes are illustrated in Figures 8A and 8B. They represent Existing with Project Conditions after development of the Project under Existing Conditions.

EXISTING WITH PROJECT INTERSECTION LEVELS OF SERVICE

Table 8A summarizes the results of the Existing with Project Conditions during the weekday morning and afternoon peak hours; the Saturday midday peak hour is summarized in Table 8B. As shown, 29 of the 31 study intersections are projected to operate at LOS D or better during the analyzed weekday peak hours. Avalon Boulevard & Del Amo Boulevard (Intersection #14) and Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) are projected to operate at LOS E or F during at least one of the analyzed peak hours. Under Existing with Project

weekend conditions, as shown in Table 7B, each of the 15 study intersections is projected to continue operating at LOS A or LOS B during the Saturday mid-day peak hour.

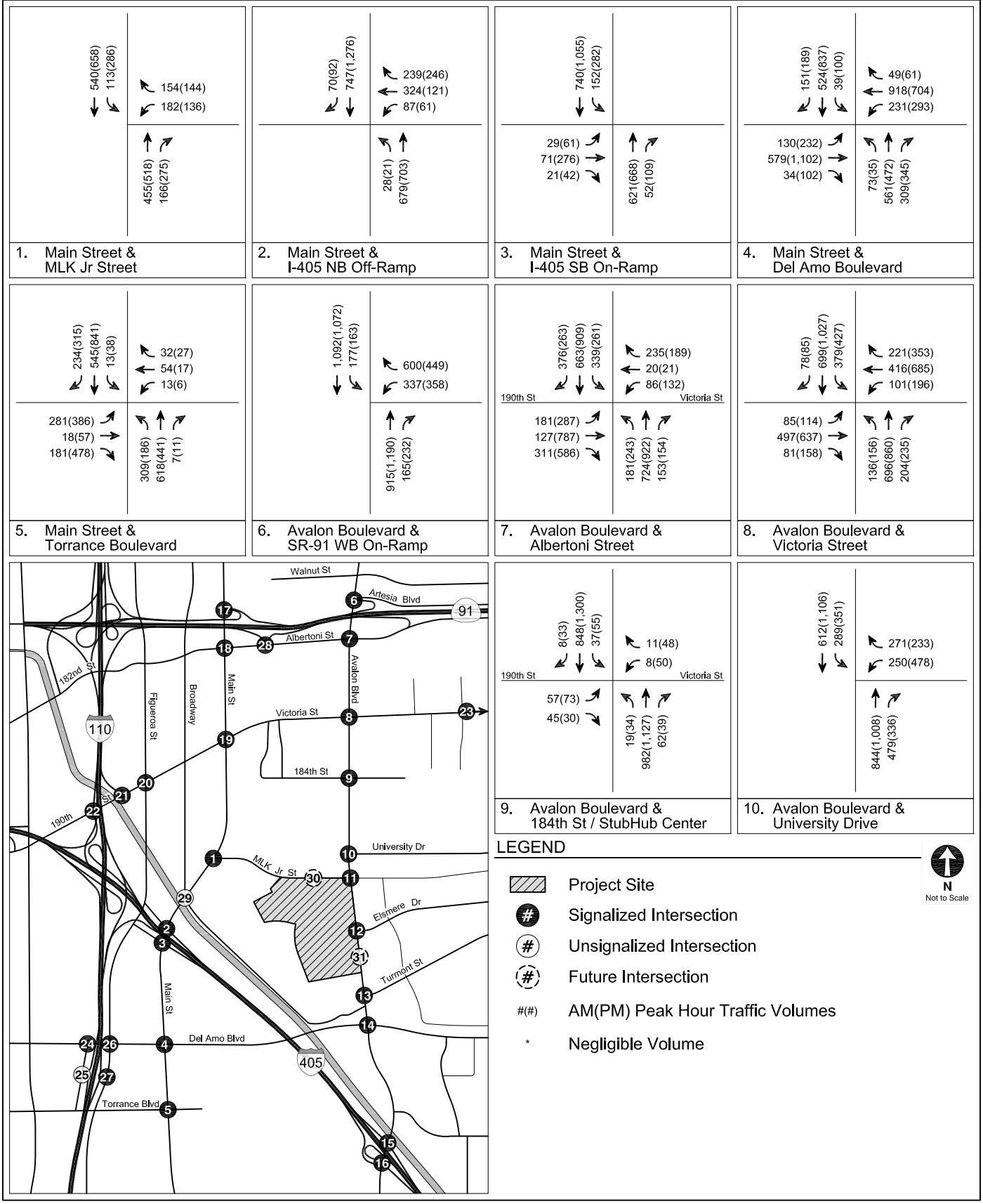
IMPACT ANALYSIS

As detailed in Tables 7A and 7B, when measuring the Existing with Project Conditions against Existing Conditions, the incremental increases in the V/C ratios resulting from Project traffic would exceed the thresholds of the LACDPW significant impact criteria at three of the 31 study intersections under Existing with Project Conditions on weekdays with no significant impacts projected during the Saturday mid-day. These impacted weekday intersections include:

7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)

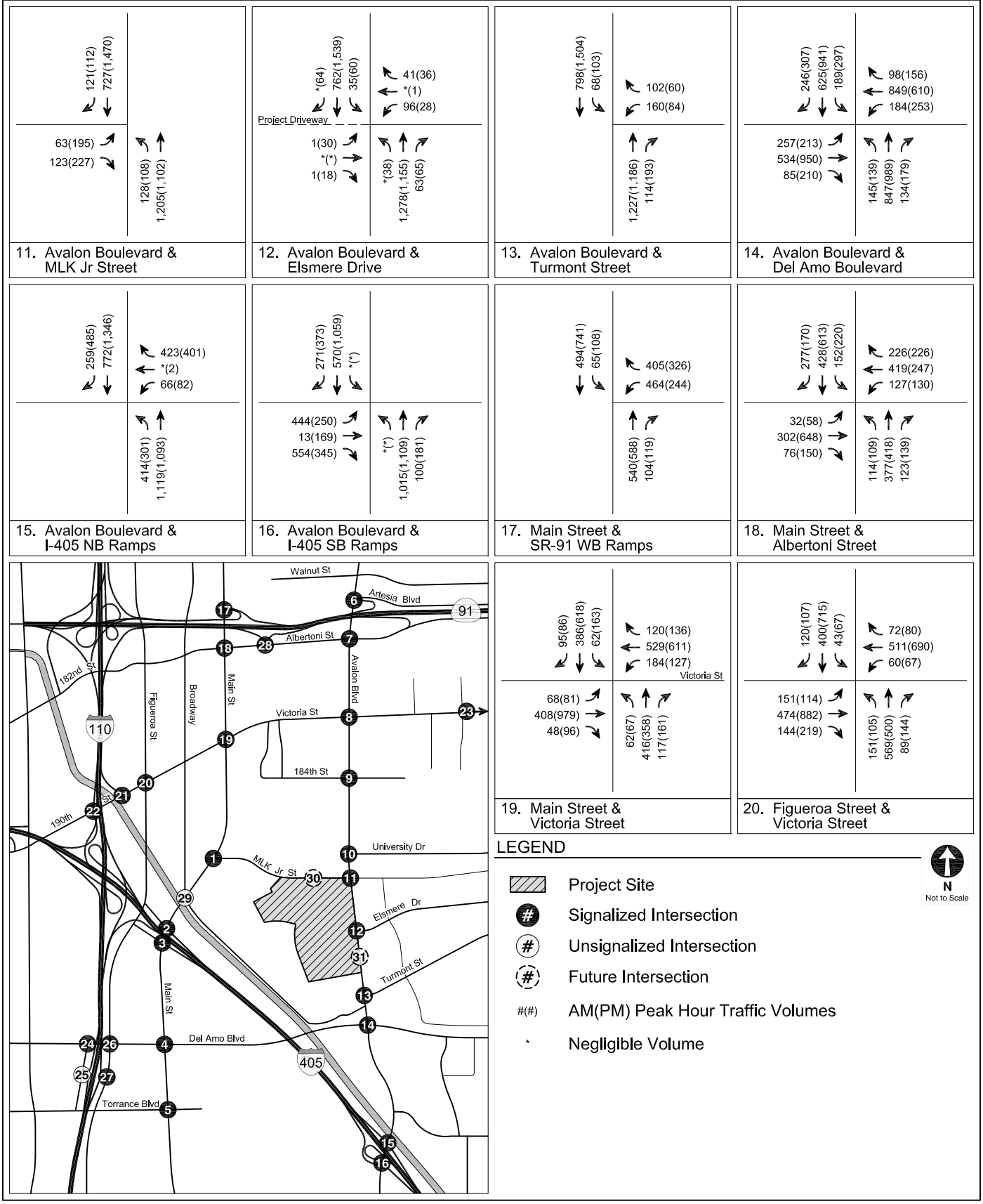
In addition, based on the signal warrant analysis performed and described in Chapter 6, Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) was identified as potentially significantly impacted under Existing with Project Conditions.

The measures proposed to mitigate the Project impacts are described in Chapter 7.



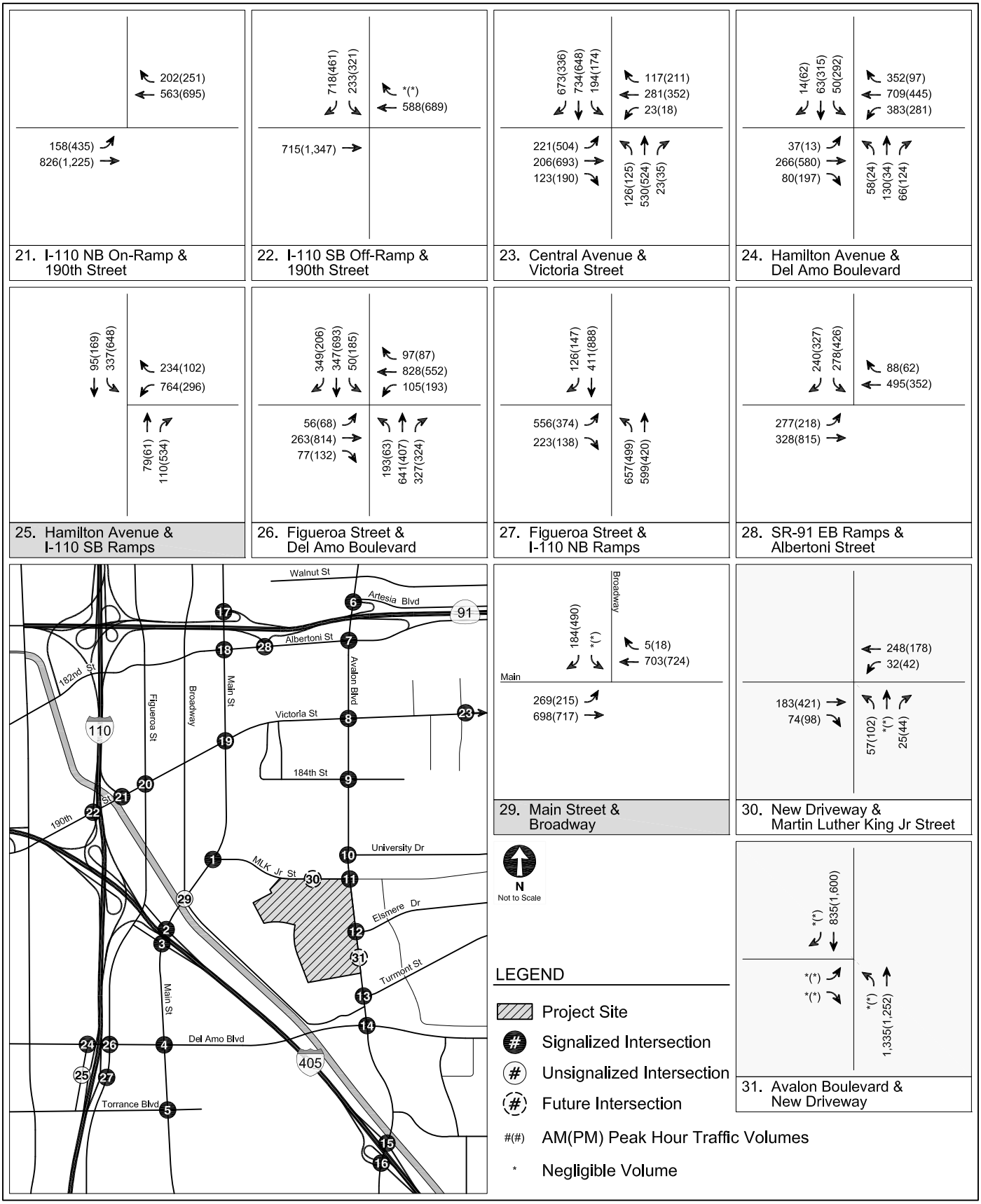
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 8A



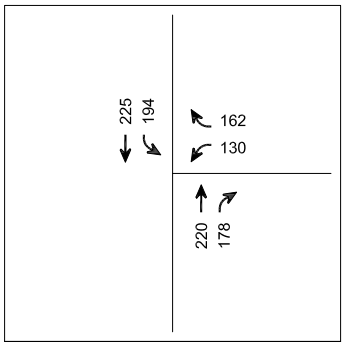
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 8A (CONT.)

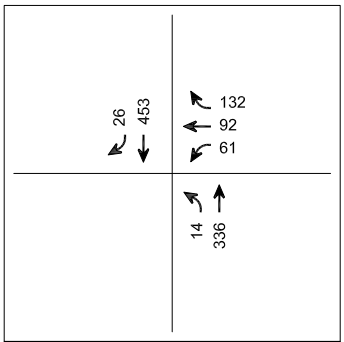


EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

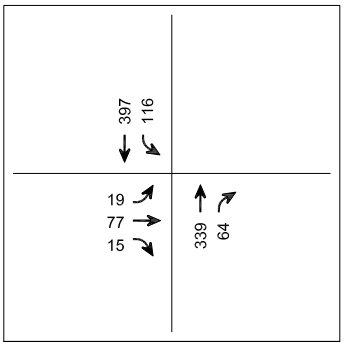
FIGURE 8A (CONT.)



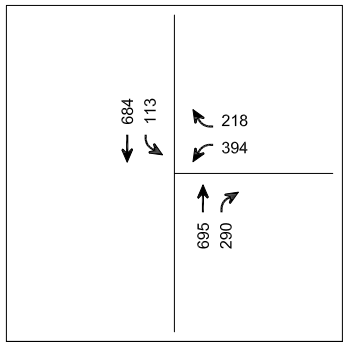
1. Main Street & MLK Jr Street



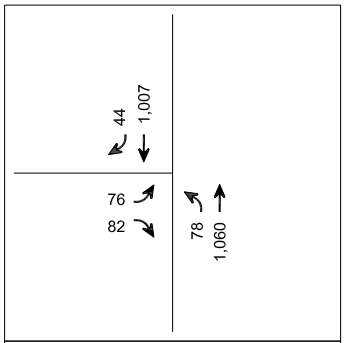
2. Main Street & I-405 NB Off-Ramp



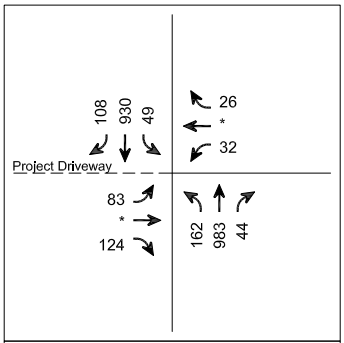
3. Main Street & I-405 SB On-Ramp



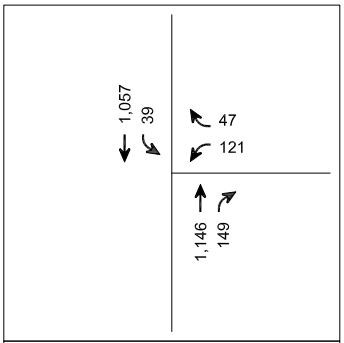
6. Avalon Boulevard & SR-91 WB On-Ramp



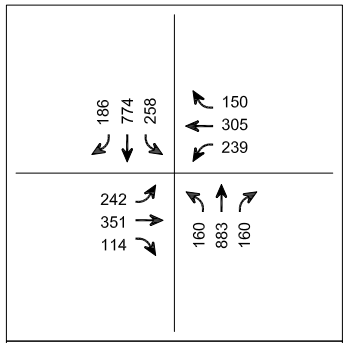
11. Avalon Boulevard & MLK Jr Street



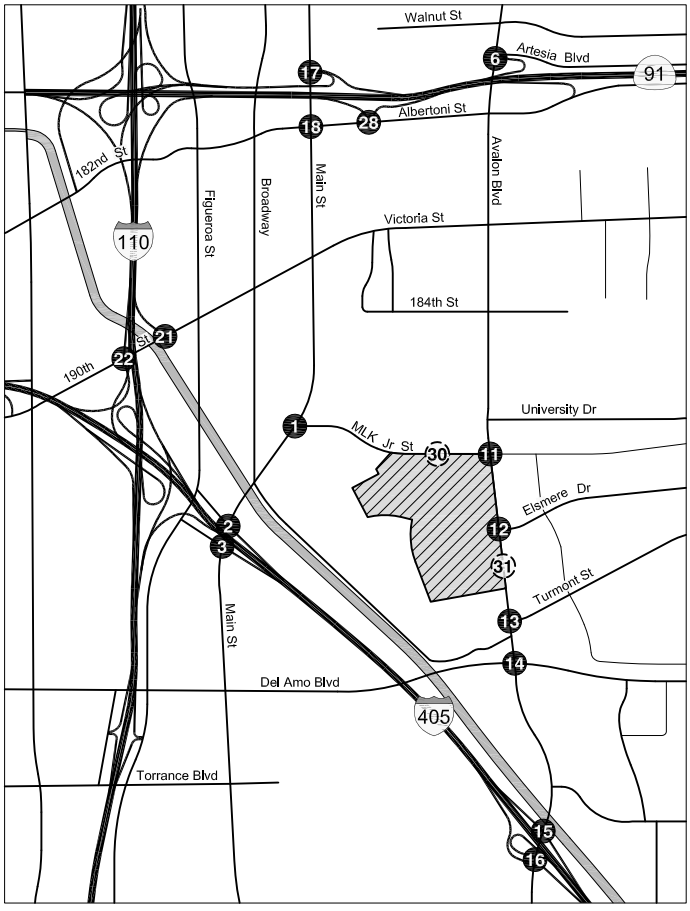
12. Avalon Boulevard & Elsmere Drive

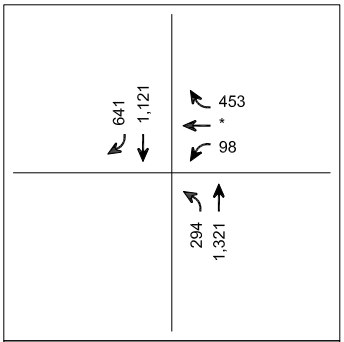


13. Avalon Boulevard & Turmont Street

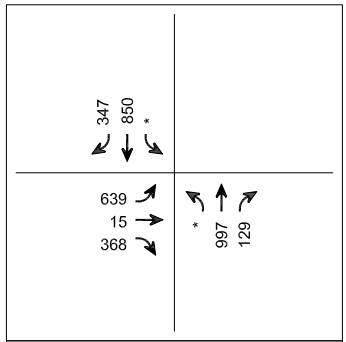


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

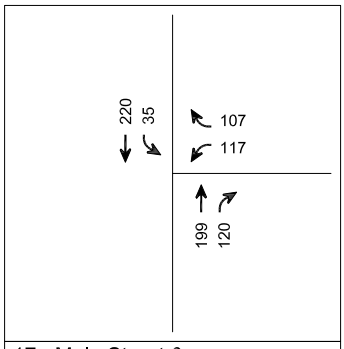
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

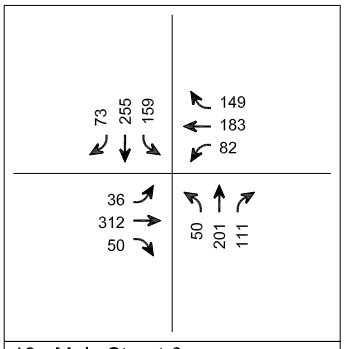
N
Not to Scale

EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

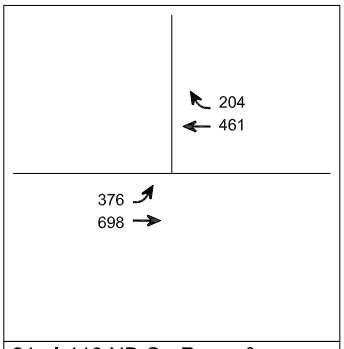
FIGURE 8B



17. Main Street & SR-91 WB Ramps



18. Main Street & Albertoni Street



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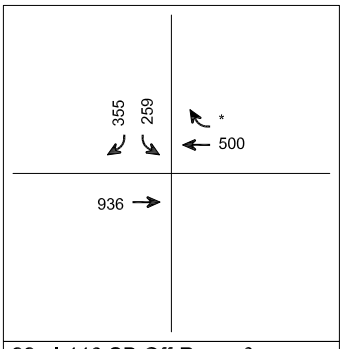

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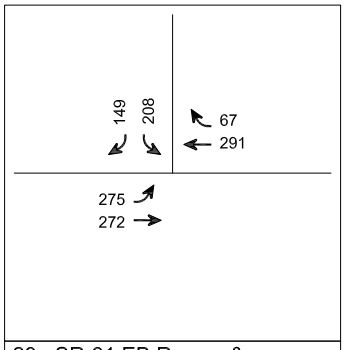
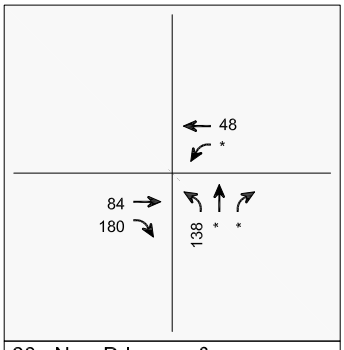
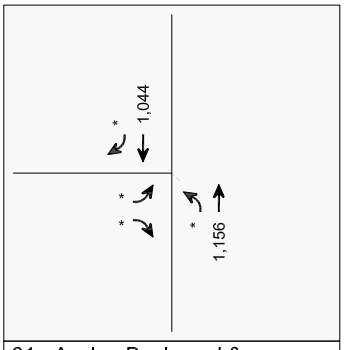


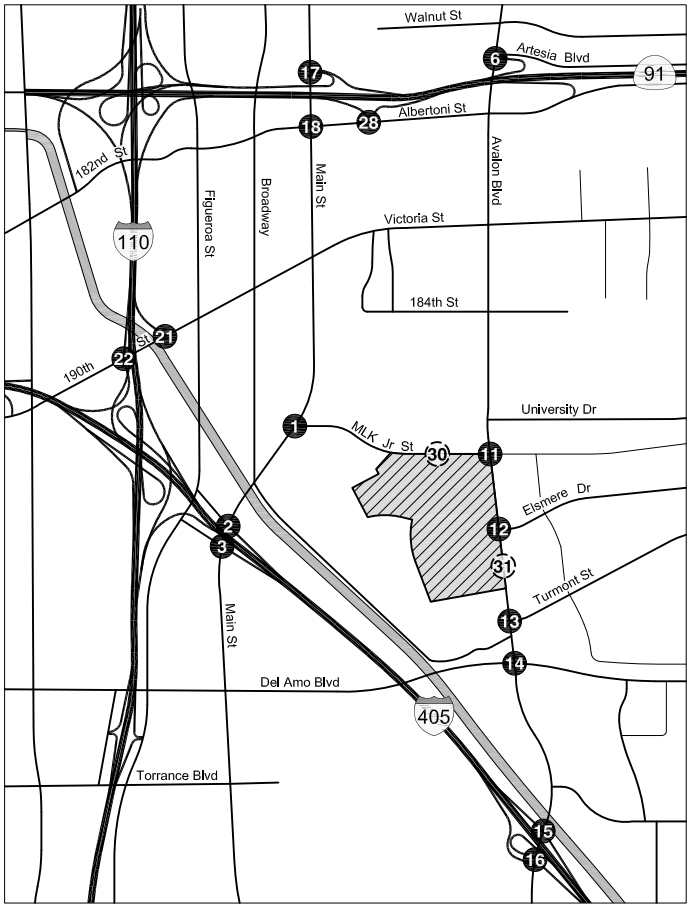
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

N
Not to Scale

EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
8B (CONT.)

TABLE 7A
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO
		PM	0.524	A	0.617	B	0.093	NO
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO
		PM	0.675	B	0.694	B	0.019	NO
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO
		PM	0.702	C	0.718	C	0.016	NO
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO
		PM	0.864	D	0.876	D	0.012	NO
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO
		PM	0.754	C	0.757	C	0.003	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO
		PM	0.570	A	0.573	A	0.003	NO
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO
		PM	0.843	D	0.865	D	0.022	YES
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO
		PM	0.736	C	0.751	C	0.015	NO
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO
		PM	0.469	A	0.484	A	0.015	NO
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO
		PM	0.723	C	0.731	C	0.008	NO
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO
		PM	0.592	A	0.639	B	0.047	NO
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO
		PM	0.435	A	0.500	A	0.065	NO
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO
		PM	0.494	A	0.504	A	0.010	NO
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO
		PM	0.897	D	0.902	E	0.005	NO
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO
		PM	0.508	A	0.511	A	0.003	NO
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO
		PM	0.586	A	0.590	A	0.004	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO
		PM	0.581	A	0.592	A	0.011	NO
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO
		PM	0.814	D	0.849	D	0.035	YES
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO
		PM	0.736	C	0.777	C	0.041	YES
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO
		PM	0.692	B	0.707	C	0.015	NO
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO
		PM	0.471	A	0.483	A	0.012	NO
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO
		PM	0.802	D	0.809	D	0.007	NO
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO
		PM	0.736	C	0.739	C	0.003	NO
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO
		PM	0.768	C	0.778	C	0.010	NO
25 [b].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[d]
		PM	81.8	F	86.7	F	4.9	[d]
[c]		AM	0.668	B	0.672	B	0.004	[d]
		PM	0.659	B	0.668	B	0.009	[d]
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO
		PM	0.822	D	0.834	D	0.012	NO
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO
		PM	0.705	C	0.711	C	0.006	NO
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO
		PM	0.621	B	0.621	B	0.000	NO
29 [b].	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO
		PM	17.1	C	18.0	C	0.9	NO
30.	New driveway & MLK Jr Street	AM	New Intersection		0.291	A	-	N/A
		PM			0.453	A	-	N/A
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.378	A	-	N/A
		PM			0.433	A	-	N/A

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] A signal warrant was performed to determine significant impacts for unsignalized intersections
[c] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[d] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 7B
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.15	NO
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.47	A	0.034	NO
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.04	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A
31.	AvalonBoulevard & New driveway	MD	New Intersection		0.341	A	-	N/A

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards

Chapter 5
Future with Project Conditions

This chapter describes the evaluation of the Project traffic on future cumulative traffic conditions (Future with Project Conditions). The analysis year of 2020 corresponds with the anticipated buildout year of the Project. Consistent with LACDPW analysis guidelines, the cumulative traffic of related projects was identified for the development of the Future Conditions.

FUTURE TRAFFIC VOLUMES

Related projects within a 1.5 mile radius of the Project site were researched for inclusion into this analysis. Due to the location of the Project site, this research included multiple jurisdictions including the Los Angeles County Department of Regional Planning for the unincorporated areas of Los Angeles County, as well as the Cities of Carson, Gardena, Los Angeles, and Torrance. Based on that research, a total of nine related projects were identified. The locations of the related projects are illustrated in Figure 9.

Trip Generation

Trip generation estimates for the related projects were provided by the respective jurisdiction or were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation, 10th Edition*. Table 8 summarizes the locations, description, and trip generation estimates of the related projects. The related projects are anticipated to generate a total of 37,703 daily trips, along with 1,843 morning peak hour and 3,162 afternoon peak hour trips. On Saturday, approximately 3,818 mid-day peak hour trips are estimated.

Trip Distribution

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

Trip Assignment

The trip generation estimates for the related projects were assigned to the local street system using the trip distribution pattern described above or as provided in a previous study. Figures 10A and 10B illustrates the peak hour traffic volumes associated with these related projects at the study intersections.

FUTURE WITH PROJECT TRAFFIC VOLUMES

The related project traffic volumes illustrated in Figures 10A and 10B were added to the Existing with Project Conditions traffic volumes illustrated in Figures 8A and 8B; the resulting volumes are illustrated in Figures 11A and 11B. These traffic volumes represent the Future with Project Conditions after development of the Project in year 2020.

FUTURE WITH PROJECT INTERSECTION LEVELS OF SERVICE

Table 9A summarizes the intersection LOS of the Future with Project Conditions during the weekday morning and afternoon peak hours. As shown, 23 of the 31 study intersections are projected to operate at LOS D or better during all analyzed peak hours. The remaining eight intersections are projected to operate at LOS E or F during at least one of the analyzed peak hours. Under Future with Project weekend conditions, as shown in Table 9B, the results of the analysis indicated that 15 of the 17 study intersections are projected to operate at LOS D or

better during the Saturday mid-day period, with the two remaining intersections operating at LOS F during the mid-day period. The intersections projected to operate at LOS E or LOS F include:

4. Main Street & Del Amo Boulevard (weekday afternoon peak hour)
7. Avalon Boulevard & Albertoni Street (weekday afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon, Saturday mid-day peak hours)
16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour)
18. Main Street & Albertoni Street (weekday afternoon peak hour)
19. Main Street & Victoria Street (weekday afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (weekday afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound Ramps (weekday morning and afternoon peak hours)
26. Figueroa Street & Del Amo Boulevard (weekday afternoon peak hour)

IMPACT ANALYSIS

As detailed in Tables 9A and 9B, when measuring the Future with Project Conditions against the Existing Conditions, the incremental increases in the V/C ratios resulting from the addition of cumulative traffic would exceed the thresholds of the LACDPW significant impact criteria at a total of 12 intersections during weekday peak hours, including the four intersections identified as potentially significantly impacted under the Existing with Project Conditions. The impacted intersections include:

1. Main Street & Martin Luther King, Jr. Street (weekday afternoon peak hour)
3. Main Street & I-405 Southbound on-ramp (weekday afternoon peak hour)
4. Main Street & Del Amo Boulevard (morning and weekday afternoon peak hours)
7. Avalon Boulevard & Albertoni Street (weekday afternoon peak hour)
8. Avalon Boulevard & Victoria Street (weekday afternoon peak hour)

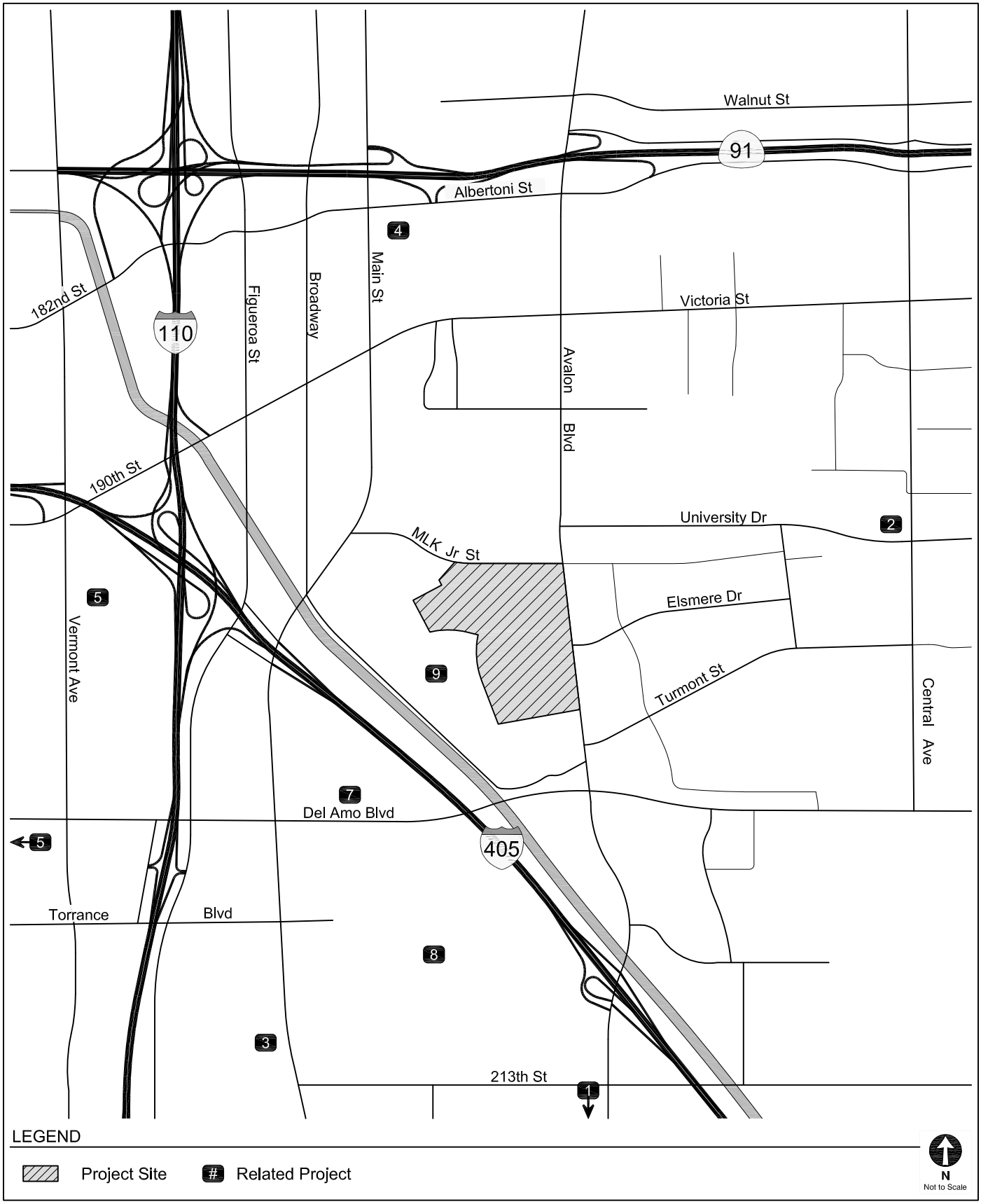
10. Avalon Boulevard & University Drive (weekday afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon peak hours)
18. Main Street & Albertoni Street (weekday afternoon peak hour)
19. Main Street & Victoria Street (weekday afternoon peak hour)
22. I-110 Southbound off-ramp & 190th Street (weekday afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (weekday afternoon peak hour)
26. Figueroa Street & Del Amo Boulevard (weekday afternoon peak hour)

In addition, based on the signal warrant analysis performed in Chapter 6, Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) is identified as potentially significantly impacted under Future with Project Conditions.

During the Saturday mid-day, under Future with Project Conditions, three intersections are projected to be significantly impacted based on LACDPW impact criteria (including one intersection not identified in the weekday analysis):

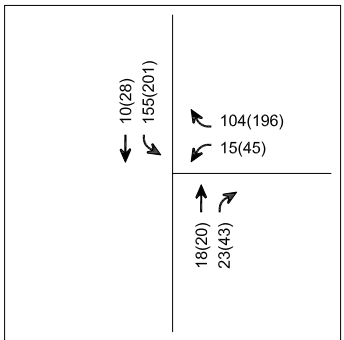
1. Main Street & Martin Luther King, Jr. Street
14. Avalon Boulevard & Del Amo Boulevard
16. Avalon Boulevard & I-405 Southbound Ramps

The measures proposed to mitigate the Project's contribution to potential weekday and Saturday cumulative impacts are described in Chapter 7.

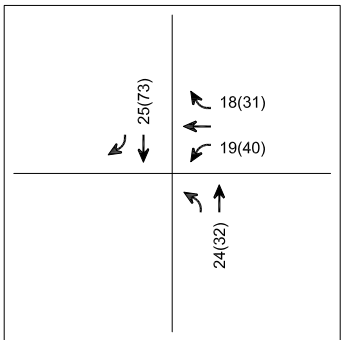


LOCATIONS OF RELATED PROJECTS

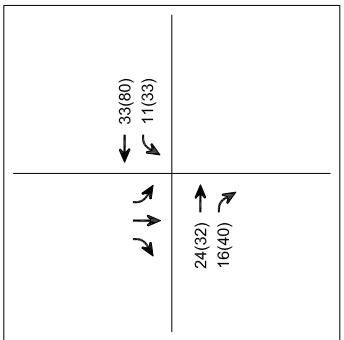
FIGURE 9



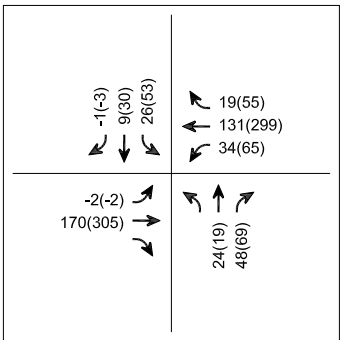
1. Main Street & MLK Jr Street



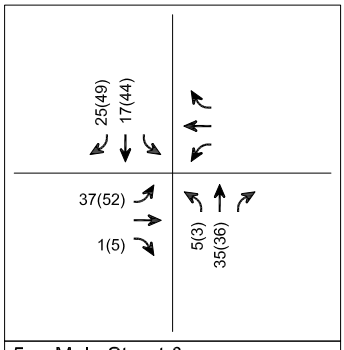
2. Main Street & I-405 NB Off-Ramp



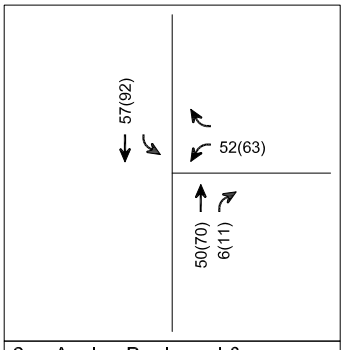
3. Main Street & I-405 SB On-Ramp



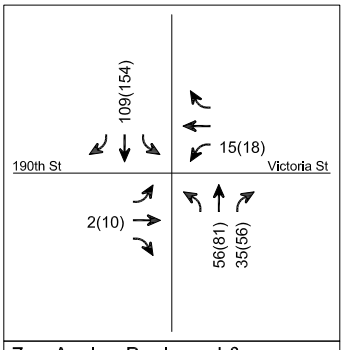
4. Main Street & Del Amo Boulevard



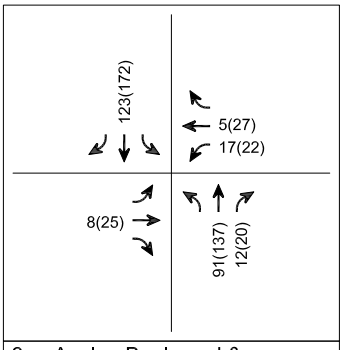
5. Main Street & Torrance Boulevard



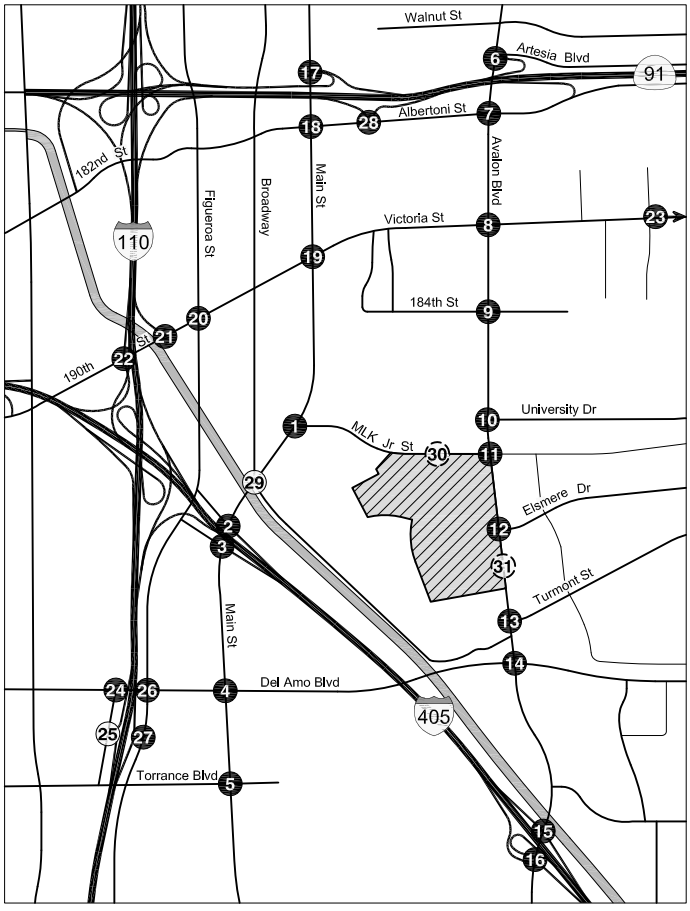
6. Avalon Boulevard & SR-91 WB On-Ramp

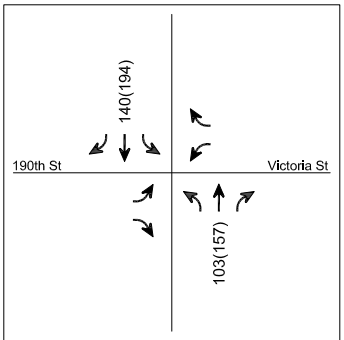


7. Avalon Boulevard & Albertoni Street

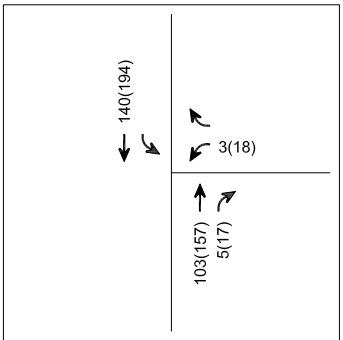


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

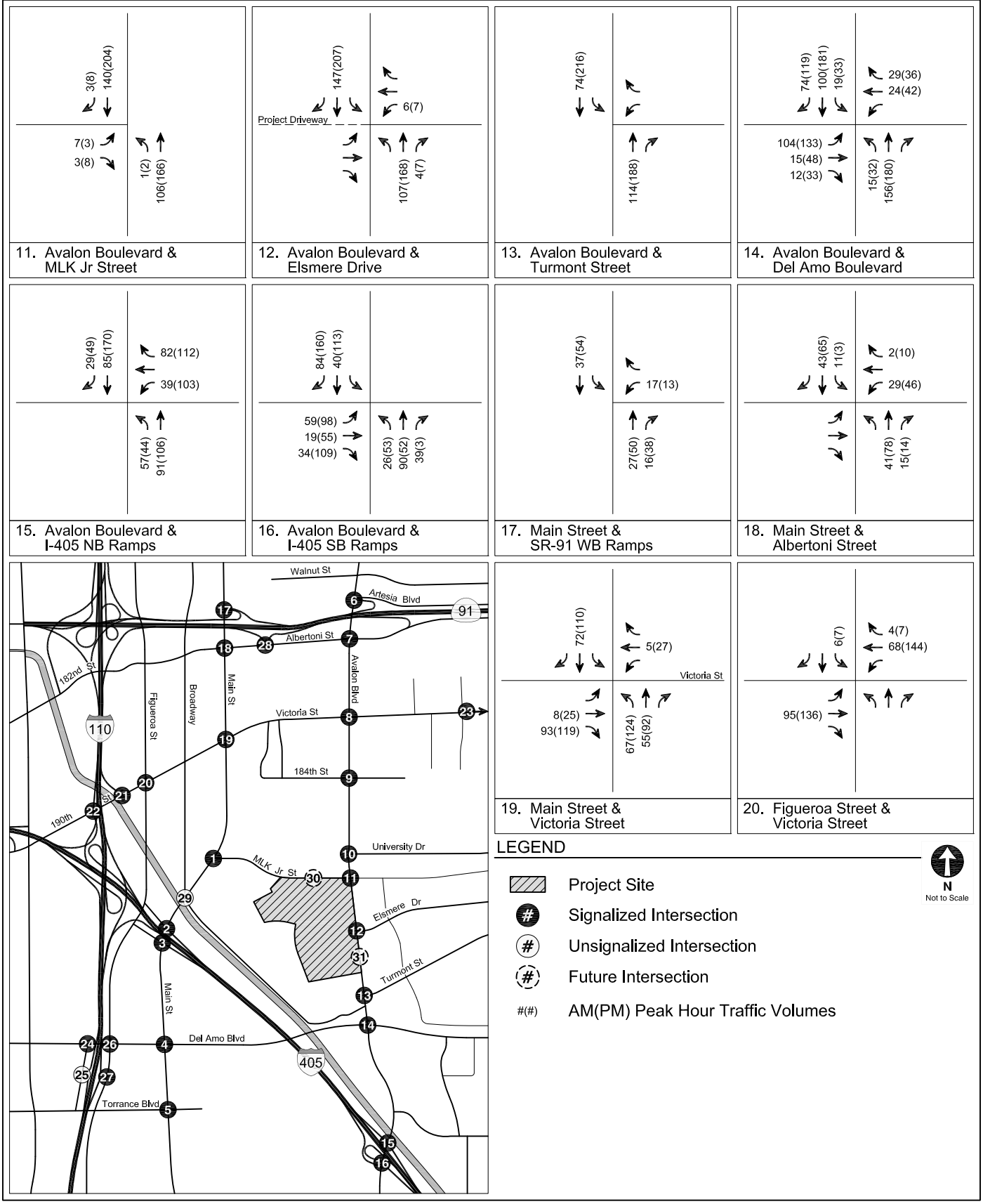
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

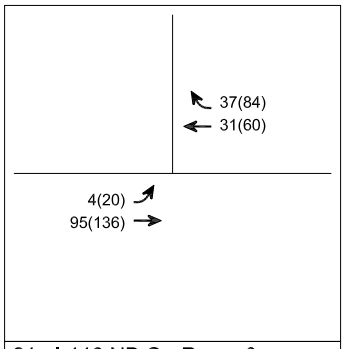
RELATED PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 10A

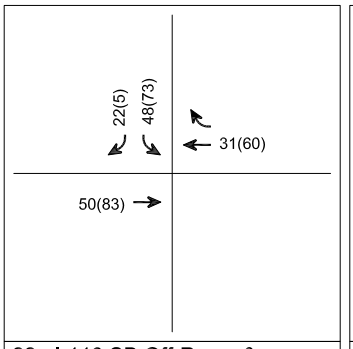


RELATED PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

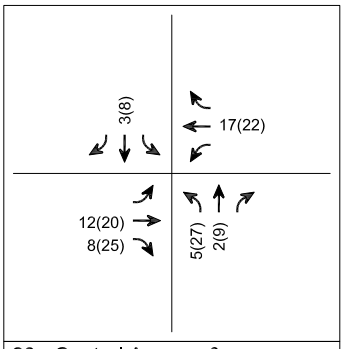
FIGURE
10A (CONT.)



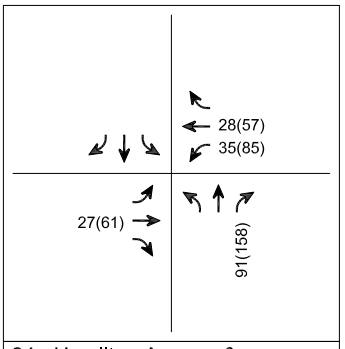
21. I-110 NB On-Ramp & 190th Street



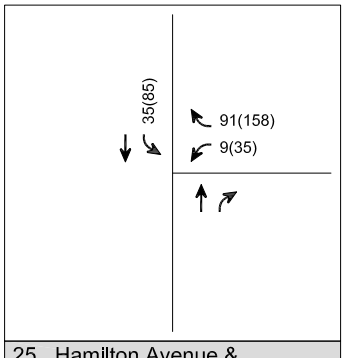
22. I-110 SB Off-Ramp & 190th Street



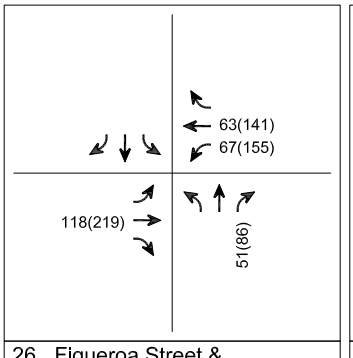
23. Central Avenue & Victoria Street



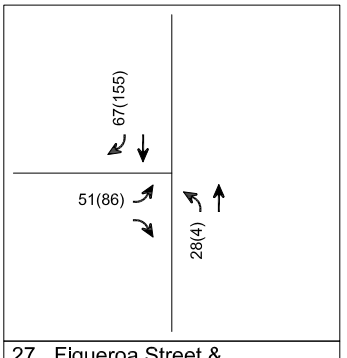
24. Hamilton Avenue & Del Amo Boulevard



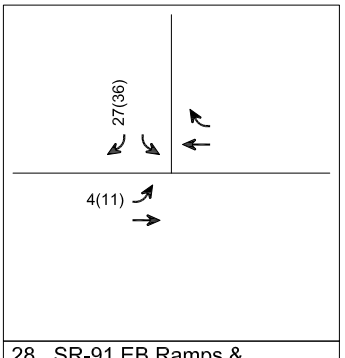
25. Hamilton Avenue & I-110 SB Ramps



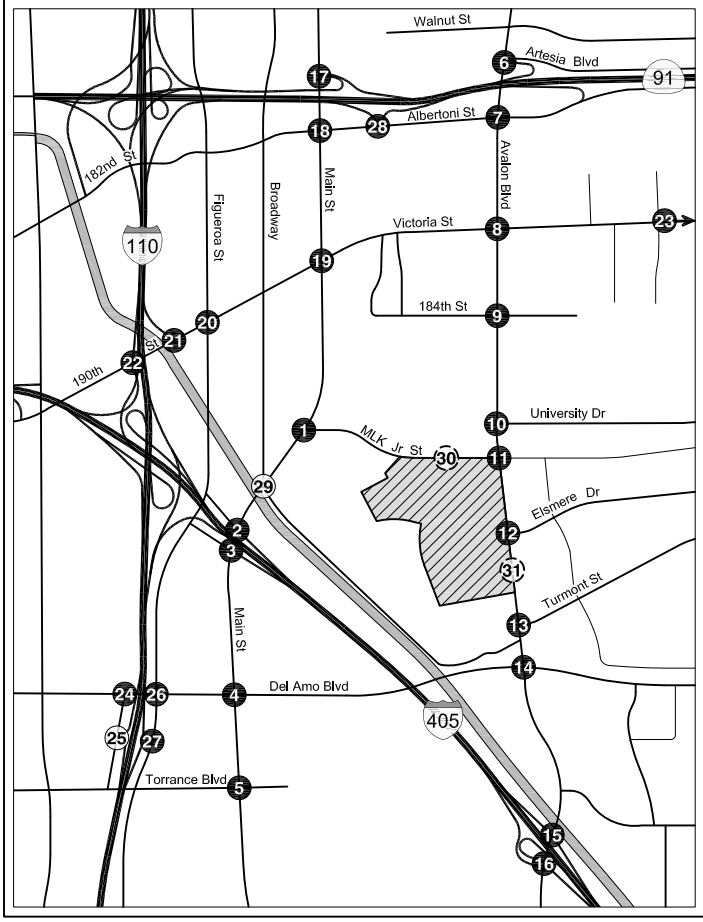
26. Figueroa Street & Del Amo Boulevard

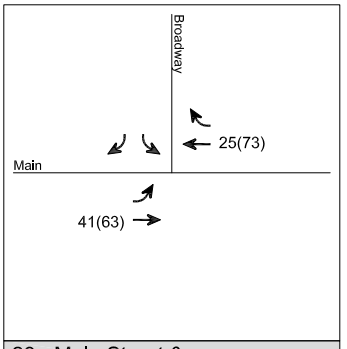


27. Figueroa Street & I-110 NB Ramps

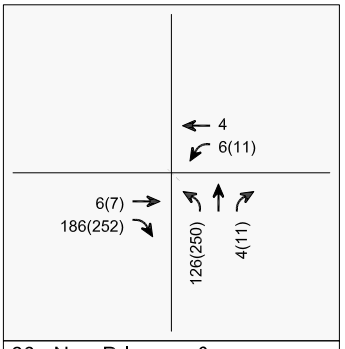


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

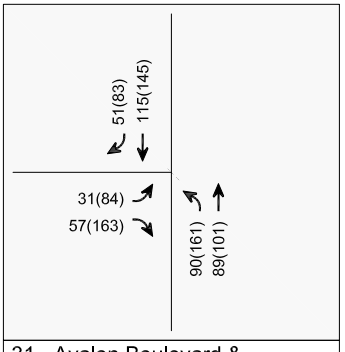


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

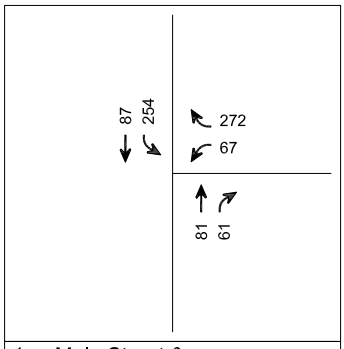
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes



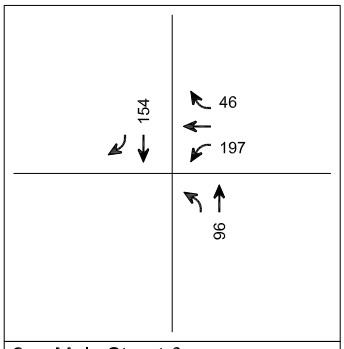
31. Avalon Boulevard & New Driveway

RELATED PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

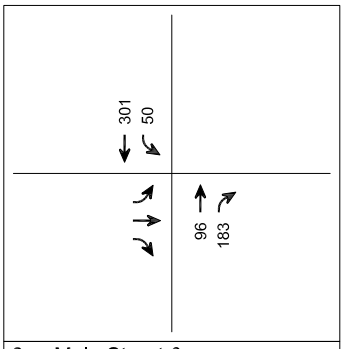
FIGURE
10A (CONT.)



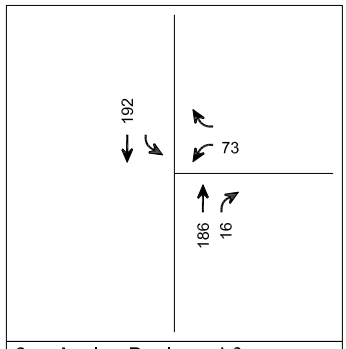
1. Main Street & MLK Jr Street



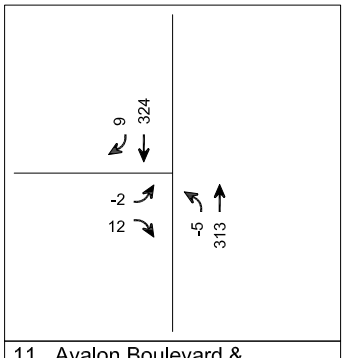
2. Main Street & I-405 NB Off-Ramp



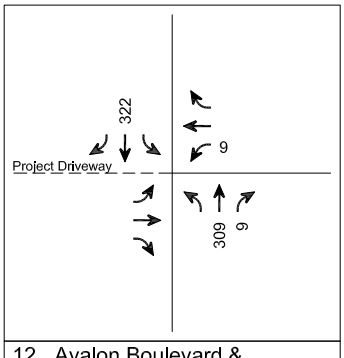
3. Main Street & I-405 SB On-Ramp



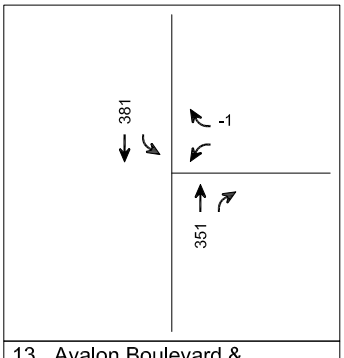
6. Avalon Boulevard & SR-91 WB On-Ramp



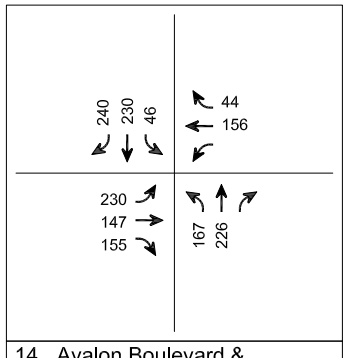
11. Avalon Boulevard & MLK Jr Street



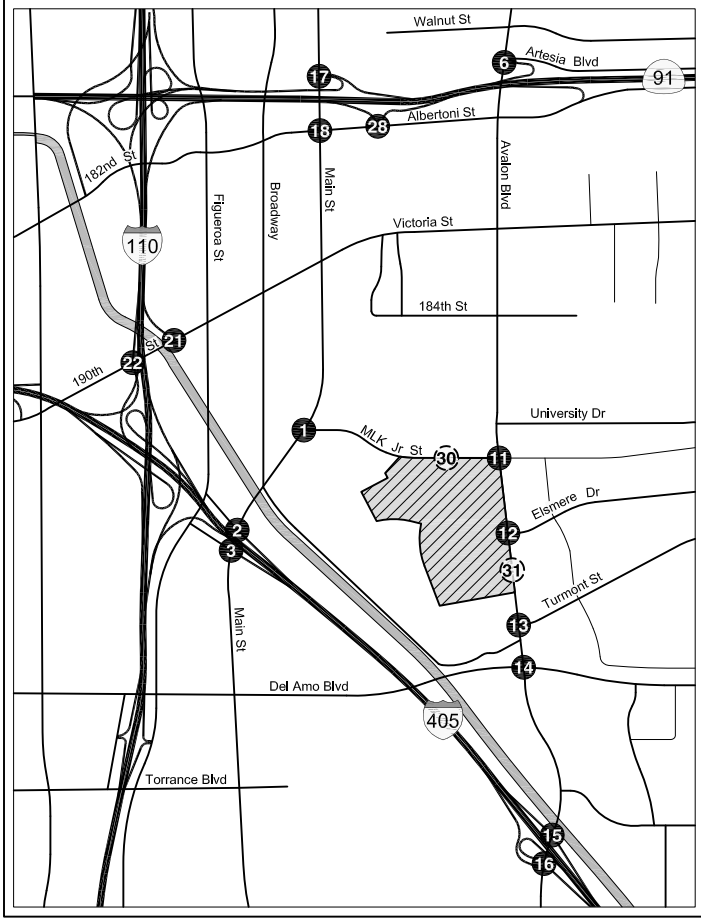
12. Avalon Boulevard & Elsmere Drive

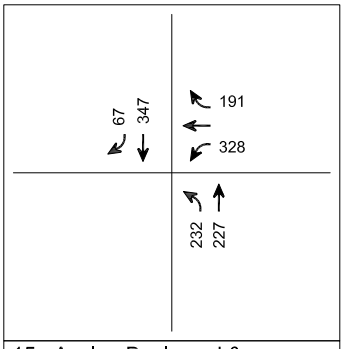


13. Avalon Boulevard & Turmont Street

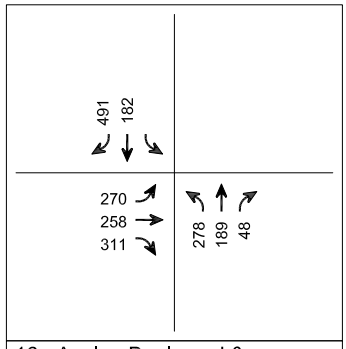


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

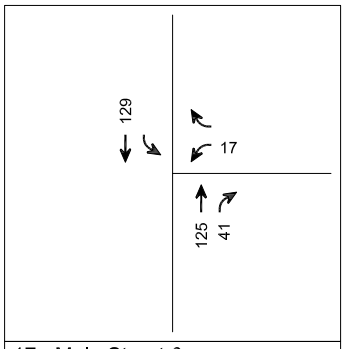
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

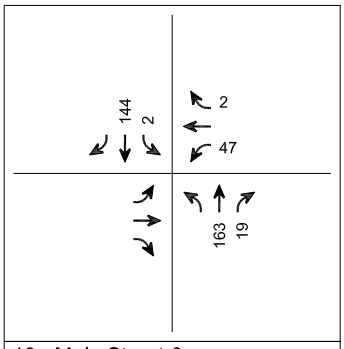
N
Not to Scale

RELATED PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

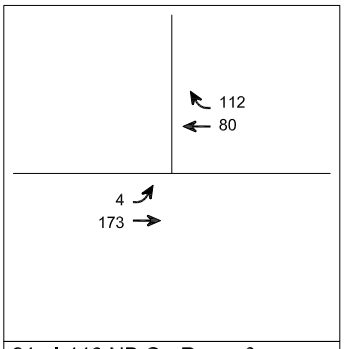
FIGURE 10B



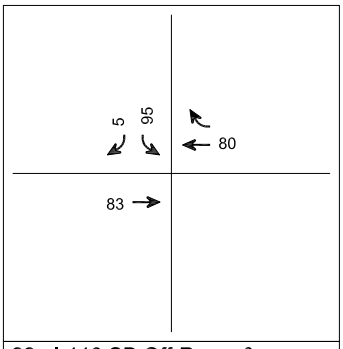
17. Main Street & SR-91 WB Ramps



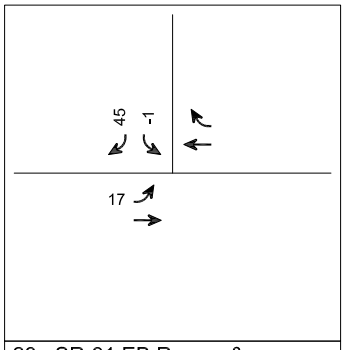
18. Main Street & Albertoni Street



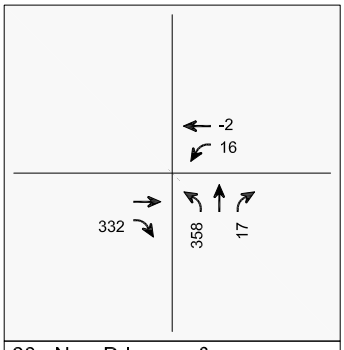
21. I-110 NB On-Ramp & 190th Street



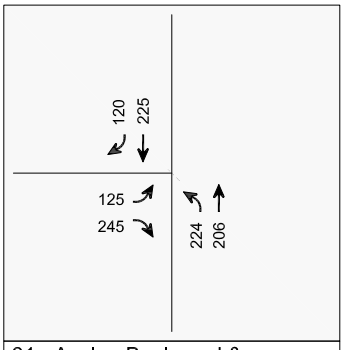
22. I-110 SB Off-Ramp & 190th Street



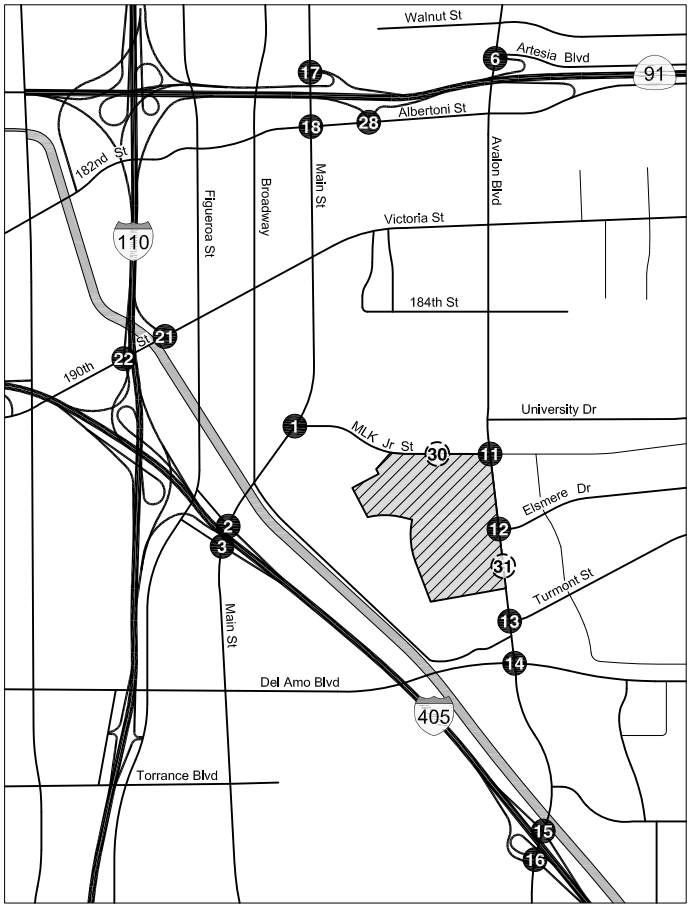
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



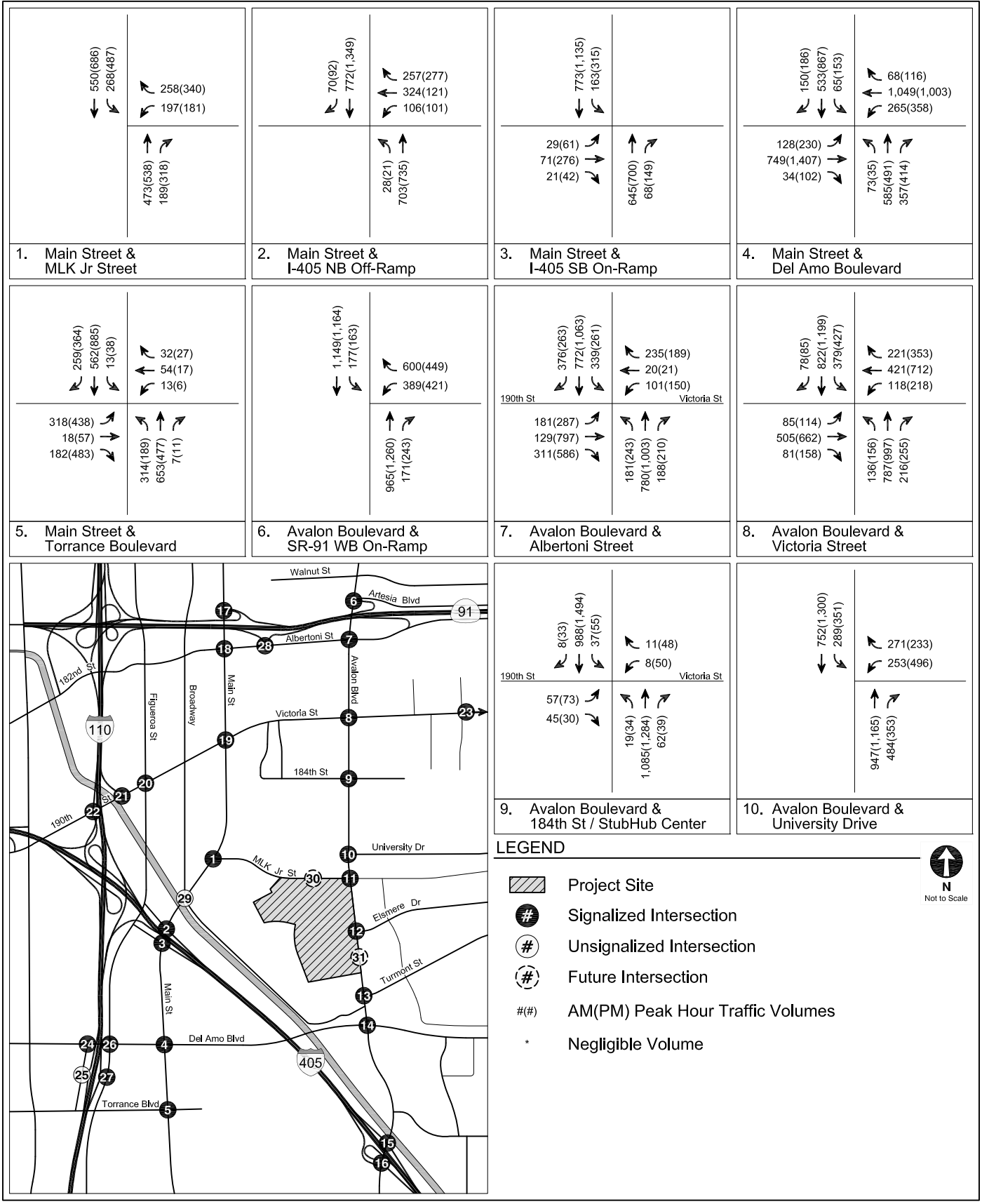
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volumes

N
Not to Scale

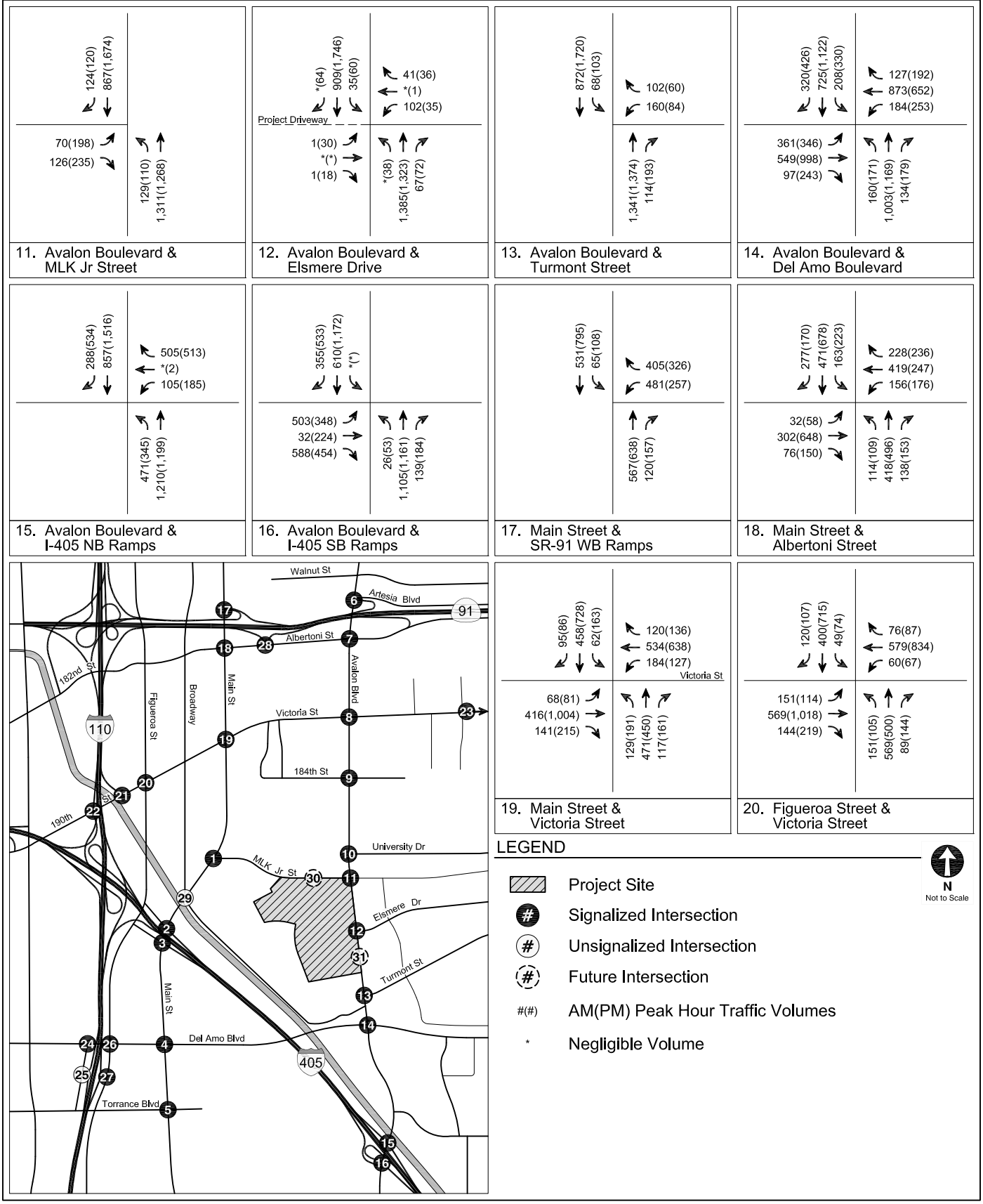
RELATED PROJECT-ONLY
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
10B (CONT.)



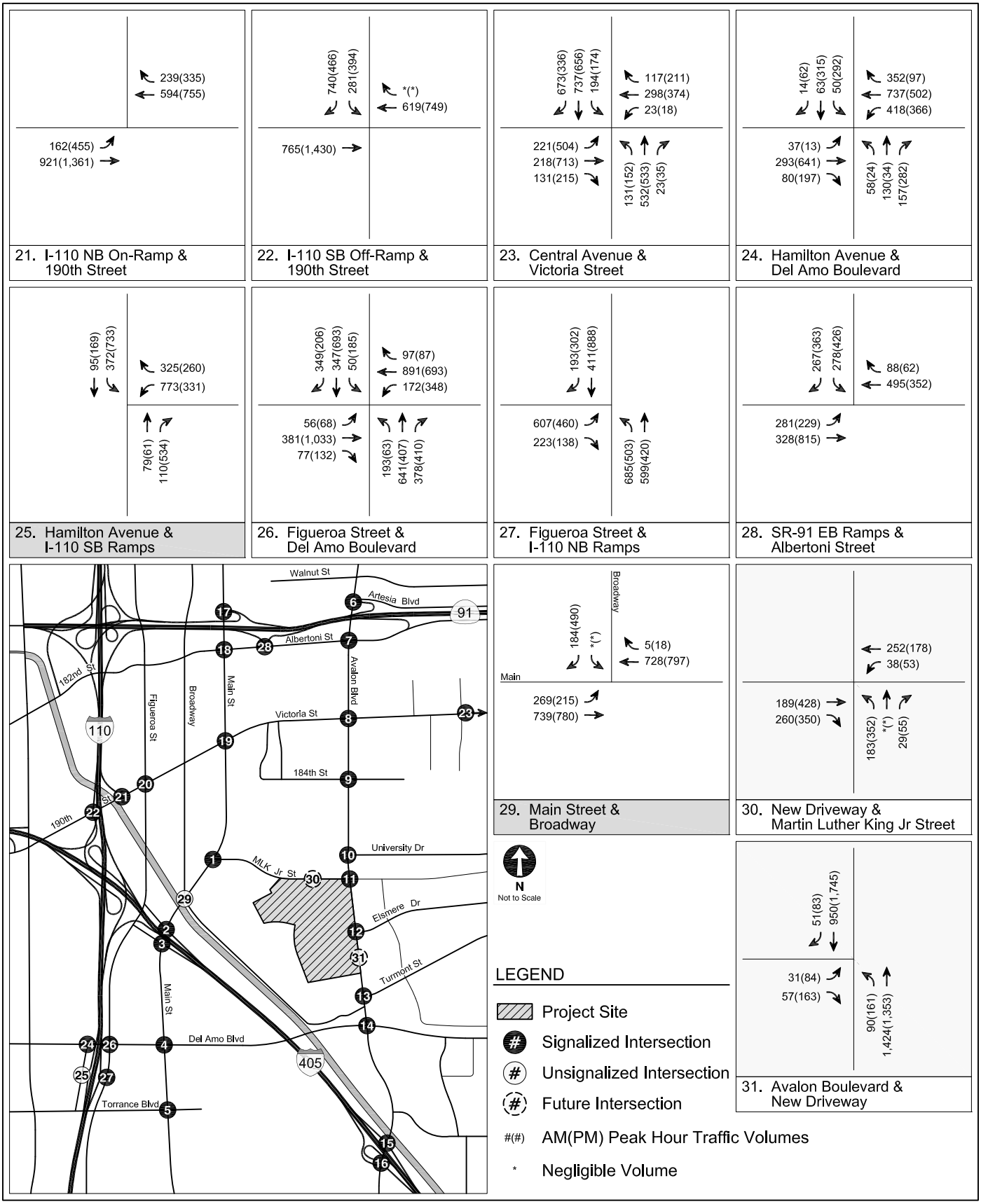
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE 11A



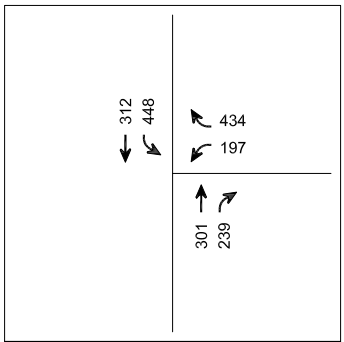
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
11A (CONT.)

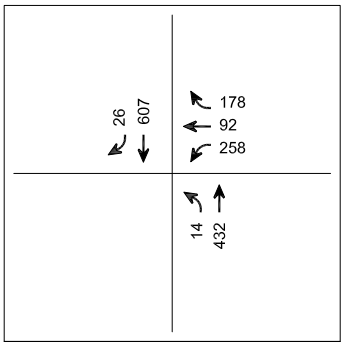


FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

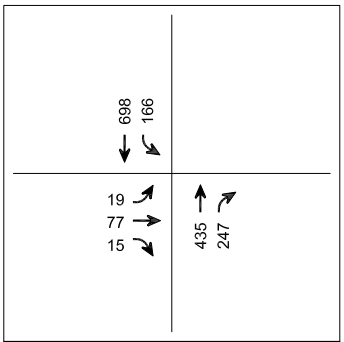
FIGURE
11A (CONT.)



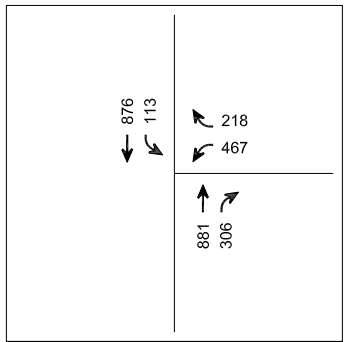
1. Main Street & MLK Jr Street



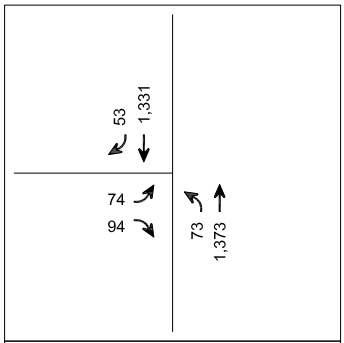
2. Main Street & I-405 NB Off-Ramp



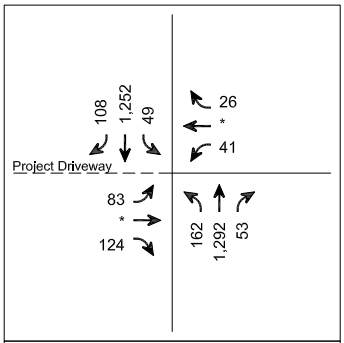
3. Main Street & I-405 SB On-Ramp



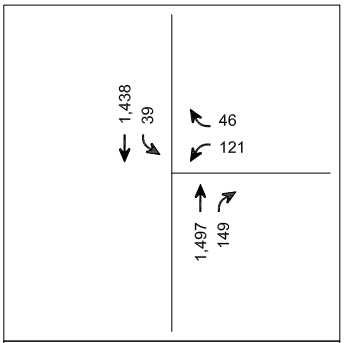
6. Avalon Boulevard & SR-91 WB On-Ramp



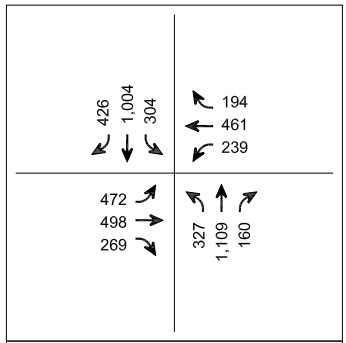
11. Avalon Boulevard & MLK Jr Street



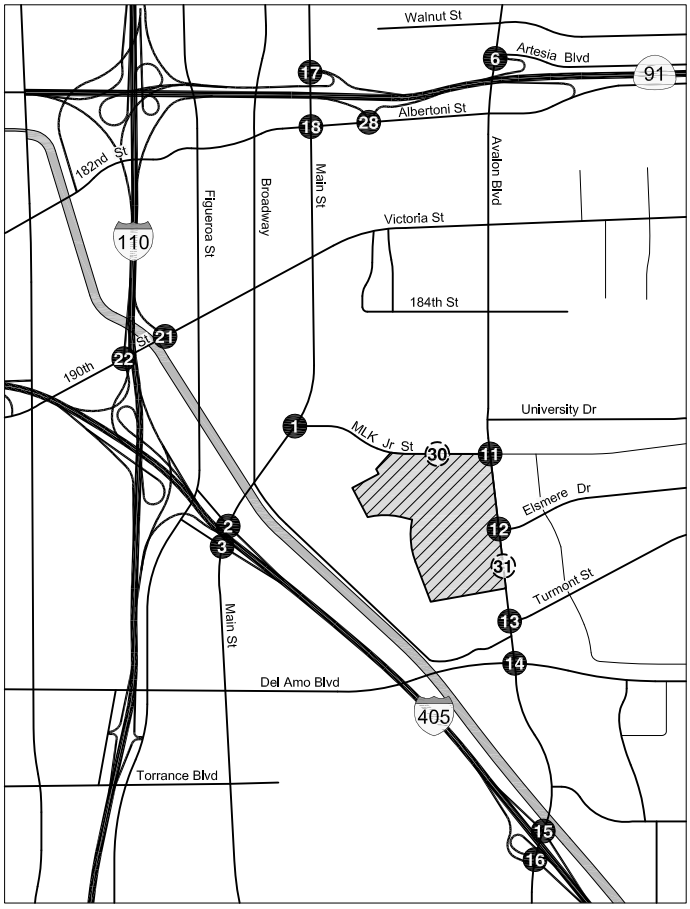
12. Avalon Boulevard & Elsmere Drive

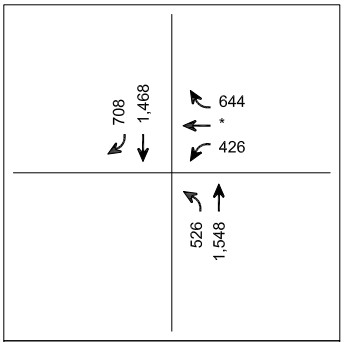


13. Avalon Boulevard & Turmont Street

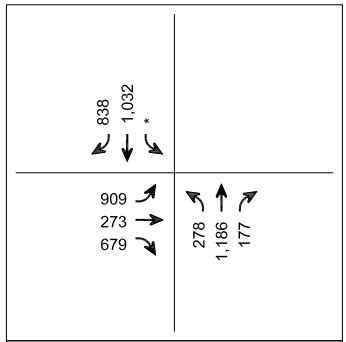


14. Avalon Boulevard & Del Amo Boulevard





15. Avalon Boulevard & I-405 NB Ramps



16. Avalon Boulevard & I-405 SB Ramps

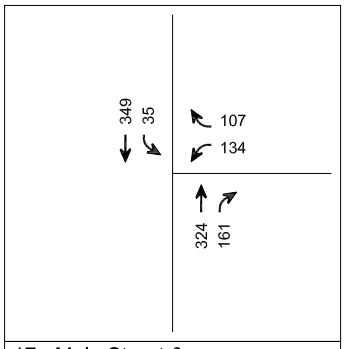
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

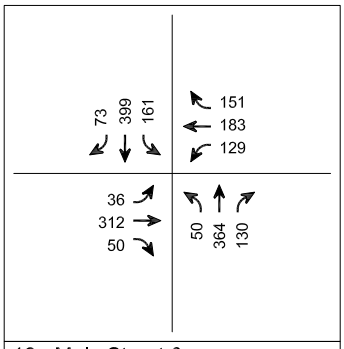
N
Not to Scale

FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

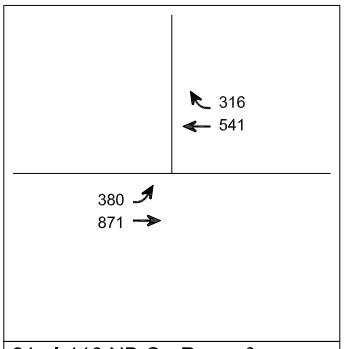
FIGURE 11B



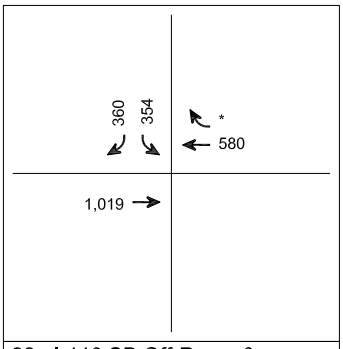
17. Main Street & SR-91 WB Ramps



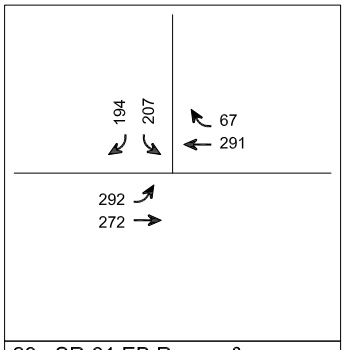
18. Main Street & Albertoni Street



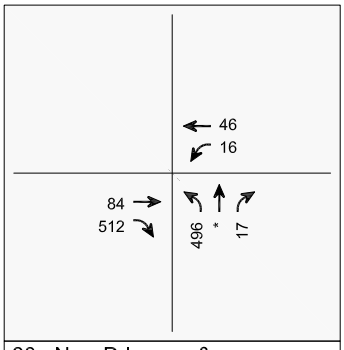
21. I-110 NB On-Ramp & 190th Street



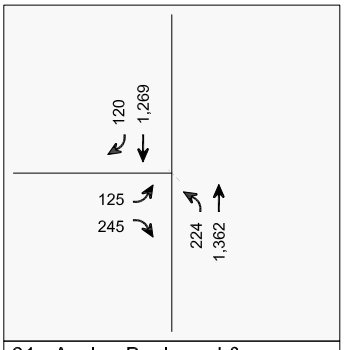
22. I-110 SB Off-Ramp & 190th Street



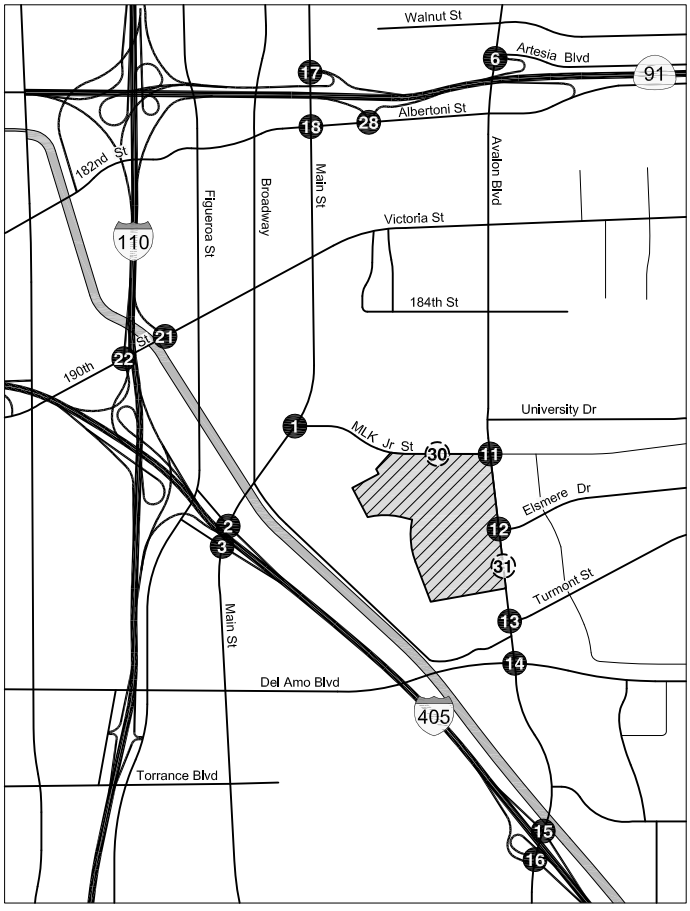
28. SR-91 EB Ramps & Albertoni Street



30. New Driveway & Martin Luther King Jr Street



31. Avalon Boulevard & New Driveway



LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- # Midday Peak Hour Traffic Volume
- * Negligible Volume

N
Not to Scale

FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
SATURDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
11B (CONT.)

TABLE 8
RELATED PROJECTS LIST

No.	Address / Project Name	Description	Weekday Trip Generation [a]						Weekend Trip Generation [b]		
			Daily	Morning Peak Hour			Afternoon Peak Hour			Saturday Peak Hour	
				In	Out	Total	In	Out	Total	In	Out	Total
1	21521 S Avalon Blvd Carson, CA	357 apartment units, 30,700 sf retail	3,685	54	156	210	199	13	336	197	191	388
2	1281 E University Dr Carson, CA	47,000 sf retail	2,007	27	16	43	84	91	175	110	102	212
3	21205 S Main St Carson, CA	46 apartment units	306	5	19	24	19	10	29	16	16	32
4	17706 S Main St Gardena, CA	94,731 sf warehouse, 15,000 sf office	503	43	9	52	11	41	53	7	6	13
5	19210 S Vermont Ave, Gardena, CA	61,500 sf office	677	84	11	95	16	76	92	18	15	33
6	1054 W 204th St Torrance, CA [c]	8.5 acre park	425	3	3	6	2	2	4	1	1	2
7	Development District #3 (11 acres) Carson, CA [c	300 dwelling units	1,580	27	109	136	84	45	129	105	105	210
8	The District at South Bay Carson, CA [e][f]	581,000 sf shopping center	12,388	228	85	313	446	502	948	592	546	1,138
9	The Creek at Dominguez Hills Carson, CA	71,000 sf marketplace, 51,000 sf restaurant, indoor sports complex, 30,000 sf youth learning experience, 7,500 sf indoor skydiving, enhanced driving range experience and putting green, 40,000 sf clubhouse, 36,000 sf sports wellness facility, zipline course, 6.6 acre park	16,132	580	384	964	727	669	1,396	878	912	1,790
TOTAL PROJECTED RELATED PROJECT GROWTH			**37,703**	**1,051**	**792**	**1,843**	**1,588**	**1,449**	**3,162**	**1,924**	**1,894**	**3,818**

Notes:
[a] All Trip generation estimates based on The District at South Bay DEIR Fehr & Peers, 2017. All related projects fall within 1.5 miles of the Kimmelman Site.
[b] Trip generation estimates for weekend rates developed based on *Trip Generation 10th Edition* Institute of Transportation Engineers, 2017 unless otherwise stated.
[c] Related projects provided by LA County on July 11th
[d] The 11 acre parcel north of Del Amo was previously included in the Carson Marketplace Project but was sold separately and is not longer part of modified project description for THE DISTRICT AT SOUTH BAY.
[e] Review of The District development phasing indicates that only the 581,000 sf shopping center portion is anticipated to be completed and operational by the Project opening year.
[f] Weekend volumes estimated by growing weekday afternoon peak hour volumes by a factor of 1.2 trips. This is based on the difference between weekday afternoon peak hour and Saturday peak hour of generator data for a shopping center (ITE 820) in Trip Generation ITE 10th edition, 2017.

TABLE 9A
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)				Future with Project Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO	0.638	B	0.223	NO
		PM	0.524	A	0.617	B	0.093	NO	0.885	D	0.361	YES
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO	0.595	A	0.028	NO
		PM	0.675	B	0.694	B	0.019	NO	0.737	C	0.062	NO
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO	0.482	A	0.030	NO
		PM	0.702	C	0.718	C	0.016	NO	0.761	C	0.059	YES
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO	0.764	C	0.099	YES
		PM	0.864	D	0.876	D	0.012	NO	1.017	F	0.153	YES
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO	0.657	B	0.035	NO
		PM	0.754	C	0.757	C	0.003	NO	0.783	C	0.029	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO	0.569	A	0.023	NO
		PM	0.570	A	0.573	A	0.003	NO	0.600	A	0.030	NO
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO	0.661	B	0.014	NO
		PM	0.843	D	0.865	D	0.022	YES	0.910	E	0.067	YES
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO	0.627	B	0.037	NO
		PM	0.736	C	0.751	C	0.015	NO	0.808	D	0.072	YES
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO	0.417	A	0.025	NO
		PM	0.469	A	0.484	A	0.015	NO	0.524	A	0.055	NO
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO	0.672	B	0.005	NO
		PM	0.723	C	0.731	C	0.008	NO	0.775	C	0.052	YES
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO	0.466	A	0.048	NO
		PM	0.592	A	0.639	B	0.047	NO	0.689	B	0.097	NO
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO	0.488	A	0.029	NO
		PM	0.435	A	0.500	A	0.065	NO	0.543	A	0.108	NO
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO	0.631	B	0.111	NO
		PM	0.494	A	0.504	A	0.010	NO	0.672	B	0.178	NO
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO	0.916	E	0.119	YES
		PM	0.897	D	0.902	E	0.005	NO	0.999	E	0.102	YES
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO	0.511	A	0.041	NO
		PM	0.508	A	0.511	A	0.003	NO	0.594	A	0.086	NO
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO	0.663	B	0.061	NO
		PM	0.586	A	0.590	A	0.004	NO	0.641	B	0.055	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO	0.656	B	0.032	NO
		PM	0.581	A	0.592	A	0.011	NO	0.620	B	0.039	NO
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO	0.723	C	0.035	NO
		PM	0.814	D	0.849	D	0.035	YES	0.927	E	0.113	YES
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO	0.642	B	0.117	NO
		PM	0.736	C	0.777	C	0.041	YES	0.934	E	0.198	YES
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO	0.635	B	0.030	NO
		PM	0.692	B	0.707	C	0.015	NO	0.748	C	0.056	NO
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO	0.388	A	0.035	NO
		PM	0.471	A	0.483	A	0.012	NO	0.525	A	0.054	NO
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO	0.802	D	0.033	NO
		PM	0.802	D	0.809	D	0.007	NO	0.838	D	0.036	YES
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO	0.809	D	0.010	NO
		PM	0.736	C	0.739	C	0.003	NO	0.763	C	0.027	NO
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO	0.607	B	0.061	NO
		PM	0.768	C	0.778	C	0.010	NO	0.949	E	0.181	YES
25 [b].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[d]	55.7	F	15.7	[d]
		PM	81.8	F	86.7	F	4.9	[d]	133.5	F	51.7	[d]
[c]		AM	0.668	B	0.672	B	0.004	[d]	0.725	C	0.057	[d]
		PM	0.659	B	0.668	B	0.009	[d]	0.781	C	0.122	[d]
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO	0.752	C	0.022	NO
		PM	0.822	D	0.834	D	0.012	NO	1.053	F	0.231	YES
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO	0.726	C	0.028	NO
		PM	0.705	C	0.711	C	0.006	NO	0.739	C	0.034	NO
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO	0.554	A	0.003	NO
		PM	0.621	B	0.621	B	0.000	NO	0.621	B	0.000	NO
29 [b].	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO	19.1	C	1.3	NO
		PM	17.1	C	18.0	C	0.9	NO	20.0	C	2.9	NO
30.	New driveway & MLK Jr Street	AM	New Intersection		0.291	A	-	N/A	0.401	A	-	N/A
		PM			0.453	A	-	N/A	0.621	B	-	N/A
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.378	A	-	N/A	0.432	A	-	N/A
		PM			0.433	A	-	N/A	0.633	B	-	N/A

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] A signal warrant was performed to determine significant impacts for unsignalized intersections.
[c] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[d] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 9B
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)				Future with Project Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO	0.820	D	0.517	YES
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO	0.468	A	0.147	NO
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO	0.474	A	0.146	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO	0.476	A	0.052	NO
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO	0.493	A	0.097	NO
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.150	NO	0.588	A	0.223	NO
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.470	A	0.034	NO	0.628	B	0.192	NO
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO	1.041	F	0.407	YES
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO	0.722	C	0.194	NO
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO	1.113	F	0.456	YES
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO	0.357	A	0.080	NO
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.040	NO	0.596	A	0.172	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO	0.416	A	0.063	NO
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO	0.640	B	0.037	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO	0.443	A	0.010	NO
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A	0.740	C	-	N/A
31.	AvalonBoulevard & New driveway	MD	New Intersection		0.341	A	-	N/A	0.613	B	-	N/A

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards

Chapter 6
Unsignalized Intersection Analysis

As described in Chapter 1, the two unsignalized study intersections were analyzed using the HCM methodology to determine the overall intersection delay under both Existing and Future Conditions. The intersection of Hamilton Avenue & I-110 Southbound ramps (Intersection #25) was also analyzed using the ICU methodology, as requested by the County. Based on *Draft Traffic Impact Analysis Report Guidelines,* a signal warrant analysis was conducted for unsignalized intersections to evaluate for the potential installation of a new traffic signal. The signal warrant analysis was conducted per the guidelines set forth in *California Manual on Uniform Traffic Control Devices* (Caltrans, 2012) (California MUTCD).

SIGNAL WARRANT ANALYSIS

The following two signal warrants were performed for the unsignalized intersections in the study area under Existing Conditions:

25. Hamilton Avenue & I-110 Southbound Ramps
29. Main Street & Broadway

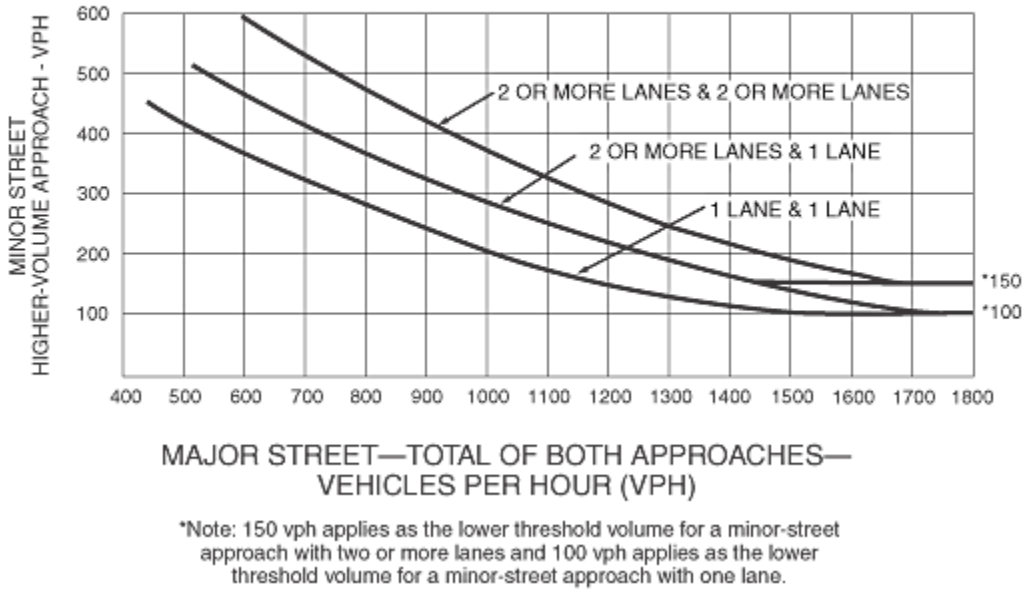
The intersections were analyzed according to Warrant 3 (peak hour). The following methodologies, as quoted from the California MUTCD, were used to evaluate signal warrants at the intersection:

Warrant 3, Peak-Hour Vehicular Volume Warrant

Signal Warrant 3 is intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street. Combined volumes for both approaches of

the major street are included while only the volume from the higher minor street approach is included. At an intersection with a high volume of left-turn traffic from the major street, the analysis may include the major street left-turn volumes plus the minor street approach volume as the total "minor street" volume. The warrant is satisfied if traffic volumes for any one hour of an average day exceed the plotted lines shown in the following figure.

Figure 4C-3. Warrant 3, Peak Hour



Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met warrants for signal installation in the afternoon peak hour under Existing, Existing with Project, and Future with Project Conditions. Detailed signal warrant worksheets are provided in Appendix G.

The determination that an unsignalized intersection meets the criteria of a traffic signal warrant does not in itself require the installation of a signal. Rather, the decision on whether a traffic signal should be installed is made by the governing jurisdictions taking into consideration other factors such as distance to adjacent signalized intersections and interruption to traffic flow along the major street. Because LACDPW and Caltrans share jurisdiction of this intersection, both entities would need to agree on the installation of a traffic signal.

Chapter 7
Mitigation Measures

This chapter describes the transportation mitigation measures considered in order to mitigate the significant transportation impacts at study intersections as a result of the Project and associated with cumulative area growth.

IMPACTED LOCATIONS

The various mitigation measures described in this chapter relate to the four significantly impacted intersections identified in the weekday under Existing with Project (Year 2018) Conditions and the 13 significantly impacted intersections identified in the weekday (including the four intersections identified in the weekday Existing with Project analysis) and the three significantly impacted intersections on Saturday under Future with Project (Year 2020) Conditions presented in Chapter 5.

Under the Existing with Project Conditions, before mitigation, the Project is expected to result in significant traffic impacts at the following four intersections:

7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound Ramps (afternoon peak hour)

The Project is expected to result in significant cumulative weekday traffic impacts in the Future with Project Conditions, before mitigation, at the following 13 intersections (including the four intersections identified in the Existing with Project analysis):

1. Main Street & Martin Luther King, Jr. Street (weekday afternoon peak hour)
3. Main Street & I-405 Southbound on-ramp (afternoon peak hour)
4. Main Street & Del Amo Boulevard (morning and afternoon peak hours)
7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
8. Avalon Boulevard & Victoria Street (afternoon peak hour)
10. Avalon Boulevard & University Drive (afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (morning and afternoon peak hours)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)
22. I-110 Southbound off-ramp & 190th Street (afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound Ramps (morning and afternoon peak hours)
26. Figueroa Street & Del Amo Boulevard (afternoon peak hour)

Although not required by LACDPW, Chapter 5 also presented an analysis of Saturday conditions at key intersections for Project operations. The analysis did not project significant transportation impacts as a result of the Project, but did identify cumulative significant impacts during Saturday conditions at the following three intersections (including one intersection not identified in the weekday analysis):

1. Main Street & Martin Luther King, Jr. Street (also weekday cumulative impact)
14. Avalon Boulevard & Del Amo Boulevard (also weekday cumulative impact)
16. Avalon Boulevard & I-405 Southbound ramps

Therefore, the mitigation measures proposed in this chapter are intended to address the weekday and Saturday significant transportation impacts.

TRANSPORTATION MITIGATION MEASURES

Consistent with the LACDPW guidelines, the mitigation program for the Project was developed in the following manner:

1. The development and implementation of measures to mitigate direct Project impacts, as identified by the Existing with Project Conditions analysis.
2. The identification of measures to mitigate cumulative impacts, as identified by the Future with Project Conditions analysis.

As described in Chapter 1, the determination of the impact is based on the pre-project intersection LOS conditions. The Project identified mitigation measures that may reduce the direct Project impact at the intersection to a less than significant level. Similarly, the Project identified feasible mitigation measures to address the cumulative impact of an intersection. Consistent with LACDPW policies, intersections operating at LOS C or D with a projected cumulative impact meet the minimum level of acceptable intersection operations; operational improvements may be utilized at these cumulatively impacted locations operating at LOS C or D. An operational analysis for impacted locations that meet this criteria is provided in Table 10. The proposed mitigation measures were developed or identified in a manner consistent with LACDPW policies.

For unsignalized intersections, a signal warrant analysis was performed, as detailed in Chapter 6, to confirm that those intersections that operate at an unacceptable LOS also meets signal warrants. Intersections that warranted a signal under Existing Conditions and contained Project traffic were considered as significant Project and cumulative impacts. The proposed mitigation measures were developed or identified in a manner consistent with LACDPW policies.

It should be noted that LACDPW does not have jurisdiction over all of the surrounding street network, as some streets/street segments are within other jurisdictions (City of Los Angeles, City of Carson, Caltrans) and those jurisdictions will decide the ultimate feasibility of the mitigation measures.

SPECIFIC INTERSECTION IMPROVEMENT MEASURES

Intersection improvements designed to alleviate both significant direct Project and cumulative impacts may consist of physical improvements, such as widening, restriping, or signalization where applicable. The intersection improvements discussed below were considered at the significantly impacted study intersections.

Mitigation Measures for Direct Project Impacts

These mitigation measures described were developed to address direct Project significant impacts at the four intersections below:

7. Avalon Boulevard & Albertoni Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be eliminated by providing an additional northbound left-turn lane, for a total of two northbound left-turn lanes on Avalon Boulevard. This measure could be accommodated by restriping the painted gore/median between the existing northbound left-turn and through lanes; the existing protected left-turn phasing on the north and south approaches may require adjustment to a lead/lag operation.

18. Main Street & Albertoni Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be eliminated by providing an eastbound right-turn lane on Albertoni Street; this would result in an eastbound approach providing one left-turn lane, two through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 24 foot wide curb lane into a 12 foot wide through lane and 12 foot wide right-turn lane and restricting on-street parking for an additional 40 feet along the south curb of Albertoni Street west of the intersection (for a total of 100 feet with restricted parking equivalent to approximately five parking spaces).

19. Main Street & Victoria Street. This intersection is projected to operate at LOS C, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be reduced to less than significant levels by providing an eastbound right-turn lane on Victoria Street; this would result in an eastbound approach providing one left-turn lane, two

through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 44 foot wide eastbound approach to provide a total of four 11 foot wide lanes, comprised of one left-turn lane, two through lanes, and one right-turn lane and restricting on-street parking for an additional 50 feet along the south curb of Albertoni Street, west of the intersection (for a total of 100 feet with restricted parking equivalent to approximately five parking spaces).

25. Hamilton Avenue & I-110 Southbound Ramps. The potentially significant impact for this intersection could be reduced to less than significant levels with the installation of a traffic signal, consisting of a northbound/southbound split phase and westbound permitted phase with overlapping right-turns, and the reconfiguration of the southbound approach to provide a dedicated left-turn lane and a left-turn/through lane. Because signal warrants were met for this intersection under Existing Conditions, a proportionate share contribution, as determined by LACDPW, would be made towards the mitigation measure, if approved by LACDPW and Caltrans. Alternatively, if the signal is not implemented, an alternative mitigation is to reconfigure the existing southbound approach to provide a dedicated left-turn lane and a left-turn/through lane. This alternative measure could be accommodated with restriping of the southbound lanes to the proposed configuration. Implementation of one or both measures may require the approval of Caltrans.

Mitigation Measures for Cumulative Impacts

The mitigation measures below were identified to address the significant cumulative impacts at the 14 intersections below (including the 13 weekday cumulative impacts and three Saturday cumulative impacts, two of which also occur as weekday impacts):

1. Main Street & Martin Luther King, Jr. Street. The significant cumulative transportation impact at this intersection could be reduced to a less than significant level by reconfiguring the westbound approach to provide one left-turn lane, one shared left/right-turn lane, and one right-turn lane. Additionally, a new northbound right-turn lane would be installed on Main Street; this would result in a northbound approach providing two through lanes and one right-turn lane. Both the northbound and southbound improvements could be implemented by restriping the existing lanes.

3. Main Street & I-405 Southbound On-ramp. This intersection is projected to operate at LOS C, which meets the LACDPW minimum requirements for acceptable intersection operation. The impact could be reduced to less than significant levels with the reconfiguration of the eastbound approach to provide a shared left-turn/through lane and a shared through/right-turn lane (onto the I-405 on-ramp). This measure could be accommodated with restriping the southbound lanes to the proposed configuration and may require the approval of Caltrans.

4. Main Street & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced by providing a northbound right-turn lane on Main Street, overlapping operation with the protected westbound left-turn phase, adding a westbound left-turn lane, and restricting westbound U-turns. This would result in a northbound approach providing one left-turn lane, two through lanes, and one right-turn lane and a westbound approach providing two left-turn lanes, two through lanes, and one through-right lane. The northbound improvements could be implemented by restriping the existing lanes while the westbound improvements would require widening through the removal of the existing median island and narrowing the north sidewalk by approximately five feet.

7. Avalon Boulevard & Albertoni Street. The mitigation measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition; this satisfies the Project obligation to mitigate its own impacts.

8. Avalon Boulevard & Victoria Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The significant cumulative impact at this intersection could be reduced to a less than significant level by reconfiguring the eastbound approach to provide one left-turn lane, two through lanes, and one shared through/right-turn lane and reconfiguring the eastbound departure to provide three receiving lanes; this reconfiguration could be accomplished through restriping. However, this may create a trapped right turn lane into the Parking Lot 11 & 12 entrance of Dignity Health Sports Park. Although the physical improvement described above could be accomplished through restriping, the geometric limitations of the eastbound departure lanes beyond the immediate vicinity of the intersection could result in the improvement being determined infeasible. Pursuant to LACDPW policy, however, when an intersection is projected to exceed the significance criteria but still operate at a satisfactory LOS (LOS D or better), LACDPW may

direct that operational improvements be implemented for the intersection rather than physical improvements. As such, per LACDPW direction, this intersection was evaluated for operational deficiencies by comparing the projected turning lane queue lengths under Future with Project conditions to the existing turning lane storage capacity at the intersection. Based on the results of the evaluation, no operational deficiencies were identified and, thus, no operational improvements are required.

10. Avalon Boulevard & University Drive. This intersection is projected to operate at LOS C, which meets the LACDPW minimum requirements for acceptable intersection operation. The significant cumulative impacts at this intersection could be reduced to a less than significant level by reconfiguring the westbound approach to provide two left-turn lanes and one right-turn lane; this reconfiguration will require modifications to the existing medians located on both Avalon Boulevard and University Avenue. The dedicated westbound bike lane on University Avenue will also require conversion into a shared lane at the intersection. Although the physical improvement described above could be accomplished through modifications to the existing medians, the physical requirements for the existing electric transmission tower within the Avalon Boulevard median could result in the improvement being determined infeasible. Pursuant to LACDPW policy, however, when an intersection is projected to exceed the significance criteria but still operate at a satisfactory LOS (LOS D or better), LACDPW may direct that operational improvements be implemented for the intersection rather than physical improvements. As such, per LACDPW direction, this intersection was evaluated for operational deficiencies by comparing the projected turning lane queue lengths under Future with Project conditions to the existing turning lane storage capacity at the intersection. Based on the results of the evaluation, no operational deficiencies were identified and, thus, no operational improvements are required.

14. Avalon Boulevard & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced by providing an additional northbound left-turn lane on Avalon Boulevard, a new southbound right-turn lane, and a new eastbound through-right lane. These mitigations would result in a northbound approach providing two left-turn lanes, three through lanes, and one right-turn lane, a southbound approach providing two left-turn lanes, three through lanes, and one right-turn lane, and an eastbound approach providing one left-turn lane, two through lanes, and one through-right lane. These measures could be accommodated by physically reconstructing the northbound left-turn pocket to generally mirror

the configuration and dimensions of the existing southbound left-turn pocket and restriping the southbound and eastbound approaches within the existing right of way.

16. Avalon Boulevard & I-405 Southbound Ramps. The significant Saturday cumulative transportation impact at this intersection could be reduced with operational modifications consisting of the addition of a southbound right-turn overlap signal phase and the associated signal equipment upgrades.

18. Main Street & Albertoni Street. The mitigation measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition; this satisfies the Project obligation to mitigate its contribution to cumulative impacts. However, a cumulative impact would remain.

19. Main Street & Victoria Street. The mitigation measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition; this satisfies the Project obligation to mitigate its contribution to cumulative impacts. However, a cumulative impact would remain.

22. I-110 Southbound Off-ramp & 190th Street. This intersection is projected to operate at LOS D, which meets the LACDPW minimum requirements for acceptable intersection operation. The significant cumulative impact at this intersection could be reduced to a less than significant level by providing an additional eastbound lane on 190th Street; this would allow access to the three existing receiving lanes on the eastbound departure of the intersection, of which the left-most lane functions as a left-turn lane at Intersection 21, I-110 Northbound On-ramp & 190th Street. The resulting eastbound approach of three through lanes could be accommodated by reducing the width of the existing painted median on 190th Street to accommodate the additional eastbound lane; however, this would require the installation of additional advance warning signage to indicate the trap lane condition, which may not be feasible due to overhead power lines and/or limited parkway for installation. Although the physical improvement described above could be accomplished through restriping, the physical requirements for the corresponding advance warning signage and the existing physical constraints could result in the improvement being determined infeasible. Pursuant to LACDPW policy, however, when an intersection is projected to exceed the significance criteria but still operate at a satisfactory LOS (LOS D or better), the County may direct that operational improvements be implemented for the

intersection rather than physical improvements. As such, per LACDPW direction, the intersection was evaluated for operational deficiencies by comparing the projected turning lane queue lengths under Future with Project conditions to the existing turning lane storage capacity at the intersection. Based on the results of the evaluation, no operational deficiencies were identified and, thus, no operational improvements are required.

24. Hamilton Avenue & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced to a less than significant level with the reconfiguration of the northbound approach on Hamilton Avenue to provide a left-turn lane, through lane, and right-turn lane along with overlap operation for the northbound right-turn. Protected-permitted left-turn phasing also would be added to the westbound approach.

25. Hamilton Avenue & I-110 SB Ramps. The measure identified in the Existing with Project condition mitigates the Project impact to a less than significant condition and reduces the overall cumulative transportation impact at this intersection; no further cumulative measures are required to be implemented by the Project.

26. Figueroa Street & Del Amo Boulevard. The significant cumulative transportation impact at this intersection could be reduced with the reconfiguration of the westbound approach on Del Amo Boulevard to provide two left-turn lanes, one through lane, and one shared through/right-turn lane and the eastbound approach to provide a left-turn lane, two through lanes, and a through-right lane; the signal would also be modified to provide northbound and southbound right-turn overlap operation. The reconfigured westbound lanes could be accommodated by converting the existing through lane, adjacent to the raised median, to left-turn operation and converting the right-turn lane to a shared through/right-turn operation. The reconfigured eastbound lanes could be accommodated by restriping the existing through-right lane into a through lane and a through-right lane.

MITIGATION EFFECTIVENESS

Direct Project Impacts

Tables 11A and 11B summarize the mitigation effectiveness at the Project impacted intersections. Each proposed mitigation measure could reduce the direct Project impact to a less than significant level.

Mitigation Measures for Cumulative Impacts

Tables 12A and 12B summarize the mitigation effectiveness at the cumulatively impacted intersections. Of the 14 proposed mitigation measures, nine cumulative impacts are mitigated and the remaining five intersections (four during weekday conditions and two during Saturday conditions, of which one is already identified as impacted during the weekday) are reduced as identified below:

Mitigated Cumulative Impact

1. Main Street & Martin Luther King, Jr. Street (weekday afternoon and Saturday mid-day peak hours)
3. Main Street & I-405 Southbound On-ramp
7. Avalon Boulevard & Albertoni Street (direct Project impact mitigated)
8. Avalon Boulevard & Victoria Street
10. Avalon Boulevard & University Drive
22. I-110 Southbound Off-ramp & 190th Street
24. Hamilton Avenue & Del Amo Boulevard
25. Hamilton Avenue & I-110 Southbound Ramps (direct Project impact mitigated)
26. Figueroa Street & Del Amo Boulevard

Reduced Cumulative Impact

4. Main Street & Del Amo Boulevard (weekday morning peak hour cumulative impact mitigated and weekday afternoon peak hour impact reduced)

14. Avalon Boulevard & Del Amo Boulevard (weekday afternoon peak hour cumulative impact mitigated and weekday morning & Saturday mid-day peak hour cumulative impacts reduced)

16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour cumulative impact reduced)

18. Main Street & Albertoni Street (direct Project impact mitigated and weekday afternoon cumulative impact reduced)

19. Main Street & Victoria Street (direct Project impact mitigated and weekday afternoon cumulative impact reduced)

Per LACDPW guidelines, the Project is responsible for the identification of physical mitigation measures for cumulative impacts along with a proportionate share payment toward their implementation, if determined feasible. The requirement for a proportionate share payment is not required at locations where a Project mitigation measure mitigates a direct Project impact to a less than significant level.

As detailed above, mitigation measures for intersections located in other jurisdictions will require the approval of the respective jurisdiction.

TABLE 10
QUEUING ANALYSIS

No.	Intersection	Lane Description		Vehicle Storage Capcity (Ft)	Future with Project Conditions			
					Morning Peak Hour		Afternoon Peak Hour	
					Vehicle Queue Length	Exceeds Capacity?	Vehicle Queue Length	Exceeds Capacity?
8.	Avalon Boulevard & Victoria Street	NB	Left	194	79	NO	142	NO
		NB	Right	200	97	NO	188	NO
		SB	Left	212	92	NO	175	NO
		SB	Left	212	92	NO	175	NO
		EB	Left	135	52	NO	107	NO
		EB	Right	150	35	NO	113	NO
		WB	Left	200	71	NO	192	NO
		WB	Right	300	104	NO	251	NO
10.	Avalon Boulevard & University Drive	NB	Right	245	185	NO	177	NO
		SB	Left	162	68	NO	103	NO
		SB	Left	162	68	NO	103	NO
		WB	Left	300	110	NO	259	NO
		WB	Right	300	128	NO	104	NO
22.	I-110 SB Off-Ramp & 190th Street	SB	Left	295	52	NO	164	NO
		SB	Right	295	267	NO	219	NO

TABLE 11A
EXISTING WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions (Year 2018)				Existing with Project with Mitigation Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO				
		PM	0.524	A	0.617	B	0.093	NO				
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO				
		PM	0.675	B	0.694	B	0.019	NO				
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO				
		PM	0.702	C	0.718	C	0.016	NO				
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO				
		PM	0.864	D	0.876	D	0.012	NO				
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO				
		PM	0.754	C	0.757	C	0.003	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO				
		PM	0.570	A	0.573	A	0.003	NO				
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO	0.649	B	0.002	NO
		PM	0.843	D	0.865	D	0.022	YES	0.824	D	-0.019	NO
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO				
		PM	0.736	C	0.751	C	0.015	NO				
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO				
		PM	0.469	A	0.484	A	0.015	NO				
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO				
		PM	0.723	C	0.731	C	0.008	NO				
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO				
		PM	0.592	A	0.639	B	0.047	NO				
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO				
		PM	0.435	A	0.500	A	0.065	NO				
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO				
		PM	0.494	A	0.504	A	0.010	NO				
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO				
		PM	0.897	D	0.902	E	0.005	NO				
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO				
		PM	0.508	A	0.511	A	0.003	NO				
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO				
		PM	0.586	A	0.590	A	0.004	NO				
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO				
		PM	0.581	A	0.592	A	0.011	NO				
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO	0.698	B	0.010	NO
		PM	0.814	D	0.849	D	0.035	YES	0.803	D	-0.011	NO
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO	0.532	A	0.007	NO
		PM	0.736	C	0.777	C	0.041	YES	0.747	C	0.011	NO
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO				
		PM	0.692	B	0.707	C	0.015	NO				
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO				
		PM	0.471	A	0.483	A	0.012	NO				
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO				
		PM	0.802	D	0.809	D	0.007	NO				
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO				
		PM	0.736	C	0.739	C	0.003	NO				
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO				
		PM	0.768	C	0.778	C	0.010	NO				
25 [b].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[d]	8.8	A	-31.2	NO
		PM	81.8	F	86.7	F	4.9	[d]	7.3	A	-74.5	NO
[c]		AM	0.668	B	0.672	B	0.004	[d]	0.596	A	-0.072	NO
		PM	0.659	B	0.668	B	0.009	[d]	0.689	B	0.030	NO
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO				
		PM	0.822	D	0.834	D	0.012	NO				
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO				
		PM	0.705	C	0.711	C	0.006	NO				
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO				
		PM	0.621	B	0.621	B	0.000	NO				
29 [b].	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO				
		PM	17.1	C	18.0	C	0.9	NO				
30.	New driveway & MLK Jr Street	AM	New Intersection		0.291	A	-	N/A				
		PM			0.453	A	-	N/A				
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.378	A	-	N/A				
		PM			0.433	A	-	N/A				

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] A signal warrant was performed to determine significant impacts for unsignalized intersections.
[c] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[d] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 11B
EXISTING WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)				Existing with Project with Mitigation Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO				
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO				
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO				
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO				
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.150	NO				
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.470	A	0.034	NO				
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO				
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO				
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO				
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO				
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.040	NO	0.449	A	0.025	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO				
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO				
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO				
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A				
31.	AvalonBoulevard & New driveway	MD	New Intersection		0.341	A	-	N/A				

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards

TABLE 12A
FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions		Future with Project Conditions (Year 2020)				Future with Project with Mitigation Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.638	B	0.223	NO	0.511	A	0.096	NO
		PM	0.524	A	0.885	D	0.361	YES	0.712	C	0.188	NO
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.595	A	0.028	NO				
		PM	0.675	B	0.737	C	0.062	NO				
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.482	A	0.030	NO	0.462	A	0.010	NO
		PM	0.702	C	0.761	C	0.059	YES	0.681	B	-0.021	NO
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.764	C	0.099	YES	0.672	B	0.007	NO
		PM	0.864	D	1.017	F	0.153	YES	0.893	D	0.029	YES
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.657	B	0.035	NO				
		PM	0.754	C	0.783	C	0.029	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.569	A	0.023	NO				
		PM	0.570	A	0.600	A	0.030	NO				
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.661	B	0.014	NO	0.661	B	0.014	NO
		PM	0.843	D	0.910	E	0.067	YES	0.854	D	0.011	NO
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.627	B	0.037	NO	0.591	A	0.001	[e]
		PM	0.736	C	0.808	D	0.072	YES	0.772	C	0.036	[e]
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.417	A	0.025	NO				
		PM	0.469	A	0.524	A	0.055	NO				
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.672	B	0.005	NO	0.672	B	0.005	[e]
		PM	0.723	C	0.775	C	0.052	YES	0.620	B	-0.103	[e]
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.466	A	0.048	NO				
		PM	0.592	A	0.689	B	0.097	NO				
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.488	A	0.029	NO				
		PM	0.435	A	0.543	A	0.108	NO				
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.631	B	0.111	NO				
		PM	0.494	A	0.672	B	0.178	NO				
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.916	E	0.119	YES	0.880	D	0.083	YES
		PM	0.897	D	0.999	E	0.102	YES	0.878	D	-0.019	NO
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.511	A	0.041	NO				
		PM	0.508	A	0.594	A	0.086	NO				
16 [b].	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.663	B	0.061	NO	0.663	B	0.061	NO
		PM	0.586	A	0.641	B	0.055	NO	0.641	B	0.055	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.656	B	0.032	NO				
		PM	0.581	A	0.620	B	0.039	NO				
18.	Main Street & Albertoni Street	AM	0.688	B	0.723	C	0.035	NO	0.730	C	0.042	NO
		PM	0.814	D	0.927	E	0.113	YES	0.880	D	0.066	YES
19.	Main Street & Victoria Street	AM	0.525	A	0.642	B	0.117	NO	0.598	A	0.073	NO
		PM	0.736	C	0.934	E	0.198	YES	0.867	D	0.131	YES
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.635	B	0.030	NO				
		PM	0.692	B	0.748	C	0.056	NO				
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.388	A	0.035	NO				
		PM	0.471	A	0.525	A	0.054	NO				
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.802	D	0.033	NO	0.722	C	-0.047	[e]
		PM	0.802	D	0.838	D	0.036	YES	0.689	B	-0.113	[e]
23.	Central Avenue & Victoria Street	AM	0.799	C	0.809	D	0.010	NO				
		PM	0.736	C	0.763	C	0.027	NO				
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.607	B	0.061	NO	0.590	A	0.044	NO
		PM	0.768	C	0.949	E	0.181	YES	0.794	C	0.026	NO
25 [c].	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	55.7	F	15.7	[f]	9.7	A	-30.3	NO
		PM	81.8	F	133.5	F	51.7	[f]	9.2	A	-72.6	NO
[d]		AM	0.668	B	0.725	C	0.057	[f]	0.638	B	-0.030	NO
		PM	0.659	B	0.781	C	0.122	[f]	0.716	C	0.057	NO
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.752	C	0.022	NO	0.747	C	0.017	NO
		PM	0.822	D	1.053	F	0.231	YES	0.715	C	-0.107	NO
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.726	C	0.028	NO				
		PM	0.705	C	0.739	C	0.034	NO				
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.554	A	0.003	NO				
		PM	0.621	B	0.621	B	0.000	NO				
29 [c].	Main Street & Broadway	AM	17.8	C	19.1	C	1.3	NO				
		PM	17.1	C	20.0	C	2.9	NO				
30.	New driveway & MLK Jr Street	AM	New Intersection		0.401	A	-	N/A				
		PM			0.621	B	-	N/A				
31.	Avalon Boulevard & New driveway	AM	New Intersection		0.432	A	-	N/A				
		PM			0.633	B	-	N/A				

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] Intersection is not impacted during the weekday analysis, but is impacted under the weekend analysis. Therefore, the proposed mitigation is shown in the "Cumulative Future with Project with Mitigation Condition" column.
[c] A signal warrant was performed to determine significant impacts for unsignalized intersections.
[d] Due to the shared jurisdiction, the intersection was analyzed using both HCM (Caltrans) and ICU (LACDPW) methodology
[e] With mitigation the impact is less than significant. However, the impact is at an acceptable LOS before mitigation and LACDPW may not require physical mitigation if further analysis does not identify operational deficiencies.
[f] Warrants were met under Existing, Existing with Project, and Future with Project Conditions

TABLE 12B
FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Future with Project Conditions (Year 2020)				Future with Project with Mitigation Conditions (Year 2020)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.820	D	0.517	YES	0.665	B	0.362	NO
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.468	A	0.147	NO				
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.474	A	0.146	NO	0.452	A	0.124	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.476	A	0.052	NO				
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.493	A	0.097	NO				
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.588	A	0.223	NO				
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.628	B	0.192	NO				
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	1.041	F	0.407	YES	0.919	E	0.285	YES
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.722	C	0.194	NO				
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	1.113	F	0.456	YES	0.912	E	0.255	YES
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.357	A	0.080	NO				
18 [b].	Main Street & Albertoni Street	MD	0.424	A	0.596	A	0.172	NO	0.580	A	0.156	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.416	A	0.063	NO				
22 [b].	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.640	B	0.037	NO	0.534	A	-0.069	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.443	A	0.010	NO				
30.	New driveway & MLK Jr Street	MD	New Intersection		0.740	C	-	N/A				
31.	Avalon Boulevard & New driveway	MD	New Intersection		0.613	B	-	N/A				

MD - Saturday Midday Peak Hour
[a] Significance based on County of Los Angeles Standards
[b] Although not impacted under Saturday conditions, the mitigation measure idnentified for the weekday analysis is applied.

Chapter 8
Special Event Management Plan

A Special Event Management Plan (SEMP) was developed to provide guidance for the management of traffic and parking operations during special events that might attract a larger number of visitors to the Project. This chapter describes the various components proposed for inclusion in the Project's SEMP, which is an operational project design feature. At a basic level, the purpose of any SEMP is to minimize the potential operational effects, on-site and off-site, associated with a large number of visitors entering and leaving a site for a special event.

As such, the major elements of the SEMP can be generally described as on-site and off-site measures, comprised of a combination of operational and physical components to appropriately manage event period traffic:

- On-site Measures: Physical Site Design/ Parking Operations/ Guest Communications
- Off-site Measures: Traffic Management / Traffic Control Officers/ Off-site Parking/ Transit Service Coordination / Schedule Coordination

The SEMP is intended to be an evolving document subject to modification over time in coordination and consultation with the County and other jurisdictions, in order to respond to changes in traffic patterns and mobility/parking technologies that may alter the travel to, and attendance of, special events at the Project.

ON-SITE MEASURES

The underlying question that the on-site measures intend to address is: "What does special event traffic do when it arrives on-site?" The measures identified below are available for use and anticipated to be applicable to special events held at either the Soccer Center or Tennis Center.

Physical Site Design

The physical site design, including the number of access points, internal circulation considerations, and location of drop-off/pick-up and parking areas, is integral to the implementation of the SEMP, as the intent is to quickly move event traffic off the public streets and into the Project site.

As illustrated in Figure 1, at full build-out, approximately one-third of the total parking supply (regular and overflow spaces) will be accessible from Martin Luther King, Jr. Street, with the remaining parking supply accessible from Elsmere Drive at Avalon Boulevard. Both primary driveways will continue to provide access from their respective streets to the Project site during special events.

During special events, access will be supplemented by allowing Project access from the employee driveway to the north. This driveway will provide access into the on-site overflow parking areas located along Avalon Boulevard, which will have internal links/drive aisles to effectively provide continuous access between the regular and overflow parking areas during events.

In addition to these access points, the primary Project driveways will be designed to provide multiple lanes for inbound/outbound access. In combination with the improvements on the public streets at the primary driveways and operational measures at all driveways, it is anticipated that Project traffic will be able to quickly move on- and off-site.

Another component to the physical site design is the location of drop-off/pick-up and bus zones across the site. A pick-up/drop-off location, specific to the Learning Center and Tennis Center, is anticipated to be located within the parking area at the northwest portion of the site; this is anticipated to be sufficient for operation of the academic center on a typical day. Similarly, the drop-off/pick-up area for the Soccer Center is anticipated to be located within the Avalon Boulevard parking area. On days with special events, the south curb of Martin Luther King, Jr. Street may be utilized as a bus zone for either the Soccer Center or Tennis Center.

Parking Operations

It is anticipated that during special events, on-site parking will be accessed without the need for entry transactions, which will accelerate the movement of vehicles into the parking facilities and reduce operational queuing and potential spillback onto public streets. Additionally, special event parking may be implemented through the assignment of parking with special event registrations and the establishment of zones, along with the use of traffic attendants to direct traffic within the parking areas. By assigning specific parking facilities, inbound special event traffic can be directed to use specific driveways, minimizing unnecessary circulation around the site.

The operational benefits for the inbound special event operations are similarly anticipated to be effective during outbound event operations. During outbound operations, internal traffic attendants and wayfinding signage will direct exiting vehicles to utilize specific driveways for specific directions of travel. Coordination between internal and external special event traffic control will also assist this process.

Guest Communications

Equally vital to the SEMP is the communication of event period information to guests before and after a special event.

As described above, with the advance registration for a special event, the location of assigned parking can be communicated to registrants. Preferred traffic routes to the assigned parking area can be provided at the time of registration and on event registration materials. Similarly, separate routing and parking directions can be created for event guests and announced through an event website or other means. At the end of an event, traffic announcements and updates can be made to event participants and guests before returning to their vehicles.

With the increasing use of mobile apps for driving directions, traffic information, and ridesharing services, coordination with these services can also facilitate the provision of event period information to a larger audience.

OFF-SITE MEASURES

The overall consideration of the off-site SEMP measures is “How does special event traffic get to the site and leave the site?” These off-site measures would be the key component of the SEMP, as the inbound and outbound flow of special event traffic can be directly affected. While the measures below are individually applicable to special events held by either the Soccer Center or Tennis Center, the combination of measures selected for a special event will largely be determined by the special event characteristics and/or anticipated attendance.

Traffic Management

Based on the intersection LOS analyses discussed in previous chapters, traffic management measures were developed to minimize the effects of special event traffic. This includes the identification of specific routing to distribute special event traffic away from already congested locations along with the use of changeable message signs at select freeway and arterial locations to communicate the preferred routing to the Project site. The use of Changeable Message Signs along the freeway would require the review and approval of other jurisdictions, such as Caltrans, in addition to any approvals the City of Carson or City of Los Angeles may require for the use of Changeable Message Signs along their arterial streets.

Coordinated Traffic Control

Traffic control adjacent to the Project site includes the use of both operational and physical measures (i.e., Changeable Message Signs). From an operational perspective, the SEMP may include coordination between the special event operator/internal traffic attendants and the County Sheriff’s Department, which will oversee and/or implement special event traffic operations.

In addition to the Project specific coordinated traffic control, coordination with other special event venues (i.e., Stub Hub Center, California State University, Dominguez Hills) may be necessary depending on the Project’s special event type/attendance. This is anticipated to

include coordination on special event scheduling (i.e., event hours, event overlap, etc.) of operation as well as overall traffic control measures.

Traffic Control Officers

Traffic Control Officers (TCOs) may be deployed to selected locations, on an as needed basis, for the purposes of directing traffic during some special events. During the before and after special event conditions, the TCOs would be able to modify/override the signal timing or lane configuration at the selected intersection(s) to facilitate operations. The effectiveness of the TCOs is estimated to provide an effective capacity increase of approximately 3-5% before any temporary lane reconfiguration. Locations anticipated for TCO deployment for some special events may include:

11. Avalon Boulevard & Martin Luther King, Jr. Street
12. Avalon Boulevard & Elsmere Drive
30. New Driveway & Martin Luther King, Jr. Street
31. Avalon Boulevard & New Driveway

Further coordination between the special event operators and the applicable jurisdictions would determine any additional locations that may require TCO deployment based on the event characteristics and/or anticipated attendance.

Schedule Coordination

As the Project shares a boundary with the event management area of the Stub Hub Center, schedule coordination is anticipated to be an element to effectively managing special event traffic. This coordination is anticipated to consist of Project scheduling staff coordinating with the Stub Hub Center scheduling staff to minimize overlapping Project special events with large events at the Stub Hub Center, where possible, and to ensure that the Stub Hub Center event management plan can implement the appropriate off-site measures if overlapping events were to occur.

SEMP LEVELS

As described in Chapter 3, with the development of the Project trip generation estimates, the Saturday operation of the Project site includes the full use of the Soccer Center under tournament conditions along with the full use of the Tennis Center under tournament conditions; this effectively represents a base operating condition for the Saturday analysis. As summarized in Chapters 4 and 5, the Saturday operating conditions are not projected to result in significant impacts to the street network, after mitigation. Although tournaments are anticipated to regularly occur at the Project site, the implementation of the SEMP would not be necessary under typical operating conditions.

The following thresholds are recommended for implementation of the SEMP:

1. All on-site measures to be implemented during:

    a. Weekend Soccer Center tournament and weekend Tennis Center tournament operating simultaneously

2. All on-site measures and selected off-site measures, as identified through coordination with the lead agency during:

    a. Weekend Soccer Center tournament and weekend Tennis Center tournament operating simultaneously plus the full use of the Tennis Center exhibition venue

    OR

    b. The scheduling of a special event at the Soccer Center (e.g., professional sports exhibition, etc.)

Chapter 9
Congestion Management Program Analysis

This chapter presents an analysis of the regional transportation facilities in the vicinity of the Project site, in accordance with the procedures outlined in the 2010 CMP.

TRAFFIC IMPACT ANALYSIS GUIDELINES

The CMP requires that TIAs be performed on three types of facilities:

- Arterial Intersections
- Mainline Freeway Segments
- The Public Transit System

The CMP identifies specific arterial and freeway mainline locations for analysis.

Arterial Monitoring Intersection TIA Guidelines

The CMP requires that a TIA be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 50 trips to an arterial monitoring intersection. The CMP analysis uses the same ICU methodology as used in earlier chapters to determine intersection V/C ratio and LOS. A significant impact requiring mitigation occurs if project traffic causes an incremental increase in intersection V/C ratio of 0.02 or greater to a facility projected to operate at LOS F (V/C > 1.00) after the addition of project traffic.

Mainline Freeway Monitoring Location TIA Guidelines

The CMP requires that a TIA be performed for all CMP mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 150 trips to a mainline freeway monitoring location (in either direction) during either the weekday morning or afternoon peak hour. The CMP analysis uses a demand-to-capacity (D/C) ratio to determine facility LOS based on capacity identified in Appendix A of the CMP. Similar to arterial monitoring intersections, a significant impact requiring mitigation occurs if project traffic causes an incremental increase in intersection V/C ratio of 0.02 or greater to a facility projected to operate at LOS F (D/C > 1.00) after the addition of project traffic.

Transit Impact Review Guidelines

The CMP requires that a transit system analysis be performed to determine whether a project would increase transit ridership beyond the current capacity of the transit system.

ARTERIAL MONITORING STATION ANALYSIS

The CMP identifies one arterial monitoring intersection within the Study Area, at Vermont Avenue & Artesia Boulevard. No other CMP arterial monitoring intersections are located within 2.0 miles of the Project site.

The morning and afternoon peak hour traffic for Vermont Avenue & Artesia Boulevard was calculated based on the number of trips entering and leaving SR 91 to the northwest of the Project site in the direction of the outlying CMP arterial monitoring intersections, conservatively assuming there would be no diverging trips.

Based on this methodology, the number of peak hour Project trips expected at the arterial monitoring intersection is:

Intersection	Peak Hour Trips		Requires CMP Analysis?
	AM	PM	
Vermont Avenue & Artesia Boulevard	11	27	No

The Project would add fewer than 50 peak hour trips at the arterial monitoring intersections nearest the Project Study Area. Therefore, the Project's CMP arterial intersection impacts are considered to be less than significant and no further analysis is required.

FREEWAY SEGMENT ANALYSIS

The CMP identifies one freeway mainline monitoring location within 2.0 miles of the Project Study Area. The closest monitoring location is located at:

- I-405 south of I-110 at Carson Scales (0.5 miles south of the Project site)

As conducted in the arterial monitoring analysis, the morning and afternoon peak hour traffic was calculated based on the number of trips running through the monitoring station, conservatively assuming there would be no diverging trips. The Project is projected to add the following trips to the freeway monitoring location during the morning and afternoon peak hours:

Freeway Segment	Direction	AM Peak Hour	PM Peak Hour	Requires CMP Analysis?
I-405 south of I-110 at Carson Scales	NB	9	14	No
	SB	8	15	No

As detailed above, the Project would add fewer than 150 peak hour trips in each direction during both the morning and afternoon peak hours at the mainline freeway monitoring location. Therefore, the Project's CMP mainline freeway impacts are considered to be less than significant and no further analysis is required.

REGIONAL TRANSIT IMPACT ANALYSIS

Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes average vehicle occupancy (AVO) of 1.4 in order to estimate the number of person trips to and from the Project and guidance regarding the percentage of Project person trips that may use public transit to travel to and from the Project site depending on the mix of uses and proximity to transit. As shown in the trip generation estimates in Table 6, to be conservative, no Project trip reduction for trips made via non-auto travel modes (e.g., bus, bicycle, walk, etc.) was taken for this analysis.

Although no transit trip credit was taken for the Project, 5% transit ridership was conservatively assumed for the CMP analysis. As shown in Table 6, accounting for Project trips traveling via non-auto modes, the Project is anticipated to generate 190 net new weekday morning peak hour trips and 437 net new weekday afternoon peak hour trips. Assuming an AVO of 1.4, the Project vehicle trips result in an estimated increase of 266 person trips during the weekday morning peak hour and 612 person trips during the weekday afternoon peak hour. Using the 5% non-auto mode split, the Project would generate approximately 13 new transit trips during the weekday morning peak hour and 31 new transit trips during the weekday afternoon peak hour.

As detailed in Chapter 2, the Study Area is served by numerous established transit routes. As shown in Tables 4A and 4B, the total residual capacity of the Metro bus lines with stops within walking distance of the Project Site is approximately 301 person trips in the morning peak hour and 202 person trips in the afternoon peak hour. This does not include additional residual transit capacity on buses operated by the City of Carson or Long Beach Transit. The Project's peak hour person trips by transit are projected to be lower than the available transit in the Study Area, as detailed in Tables 4A and 4B.

Although the Project (and other Related Projects) will cumulatively add transit ridership, the Project Site and Study Area are served by numerous transit lines. As such, the overall transit capacity in the Study Area can accommodate the Project's transit trips. Therefore, the Project is not anticipated to result in material regional transit impacts.

Furthermore, Los Angeles County voters approved Measure R, a half-cent sales tax increase for transportation, which has allowed Metro to develop projects to improve the existing transportation system. *2009 Long Range Transportation Plan* (Metro, Adopted 2009) (2009 LRTP), which outlined a range of transit and highway projects throughout Los Angeles County that were aimed to improve mobility and address future growth, is currently in the process of an update to address transportation issues and projects identified by local jurisdictions, Councils of Governments, and transportation agencies. *2014 Short Range Transportation Plan* (Metro, Adopted 2014) identifies projects and programs that will be implemented in accordance with the Project priorities and funding schedules of the 2009 LRTP. It is recognized that with these plans in place, Metro will continue to maintain and expand regional transit service in order to accommodate cumulative demand in the region. Although the Project (and other related projects) will cumulatively add transit ridership, Metro will continue to maintain and expand regional transit service to accommodate cumulative demand in the region; therefore, cumulative impacts on public transit are considered to be less than significant.

Chapter 10
Supplemental Caltrans Analysis

This Chapter presents an analysis of Caltrans facilities, including freeway mainline segments, Caltrans intersections, and off-ramp queuing to provide further information to the decision makers.

As detailed in Chapter 1, under SB 743, the focus of transportation analysis will shift from driver delay to VMT, reduction of GHG, creation of multimodal networks, and promotion of mixed-use developments. To better align with the State's multimodal transportation and environmental action goals, Caltrans is also pursuing VMT as a metric of Project impacts, as outlined in the Caltrans Interim Guide. This interim guidance will remain in effect until superseded by new Caltrans transportation impact study guidelines, which are currently under development.

CALTRANS METHODOLOGY

The Caltrans Interim Guide suggests the approach with which Caltrans can recommend improvements to enhance pedestrian safety and increase pedestrian accessibility to help meet the goals and targets of *Caltrans Strategic Management Plan 2015-2020* (Caltrans, March 2015) (SMP) and *California Transportation Plan 2040* (Caltrans, June 2016). The Caltrans Interim Guide directs lead agencies to consider "multi-modal solutions from existing regional transportation plans, regional plans, transit plans, bicycle plans, and pedestrian plans."

To provide further information to the decision makers, this analysis on Caltrans facilities was conducted using HCM methodology for informational purposes. The analyses results are summarized below, with supporting data provided in Appendix H.

ANALYZED FACILITIES

As shown in Table 13, the analyses conducted on Caltrans facilities included freeway mainline segments, signalized and unsignalized ramp intersections, and off-ramp queuing. Six freeway mainline segments on I-405, three freeway mainline segments on SR 91, and four freeway mainline segments on I-110 were analyzed using HCM methodology to determine density, speed, and LOS. One unsignalized and 10 signalized intersections, all freeway ramp locations, were analyzed using HCM methodology to identify vehicle delay and LOS. Three freeway off-ramps along I-405, three freeway off-ramps along SR 91, and three freeway off-ramps along I-110 were analyzed for ramp queue lengths, using Vistro software to estimate queues. LOS worksheets for each type of analysis are provided in Appendix H.

This analysis reviewed the potential Project-generated traffic impacts on Caltrans facilities as compared to Existing Conditions (Year 2018) and projected Future Conditions at the time the Project is anticipated to be occupied (year 2020).

FREEWAY MAINLINE SEGMENTS

Six freeway mainline segments on I-405, three freeway mainline segments on SR 91, and four freeway mainline segments on I-110 were analyzed using HCM methodology. The LOS definitions for freeway mainline segments are presented in Table 14.

Freeway Mainline Segment Analysis

Existing freeway volumes were based on traffic volume data for an average weekday in *2017 Traffic Volumes on California State Highways* (Caltrans, 2018), which consists of the annual average daily traffic (AADT) volumes, as well as the two-way peak hour percent of AADT factor and the percent of traffic in the peak direction factor used to develop peak hour volumes, were utilized. Future traffic volumes were projected for year 2020 to reflect the Project buildout year. The existing traffic volumes were increased by both ambient growth (assumed to be 1% total) and Related Project traffic. The freeway mainline segment volumes are summarized in Table 15.

Table 16 summarizes the results of the HCM analysis for Existing Conditions and Existing with Project Conditions. Table 17 summarizes the results of the HCM analysis for Future without Project Conditions and Future with Project Conditions. Given the operating conditions projected for the freeway mainline segments in the future and that there is no Caltrans specific incremental criteria by which to measure the significance of impacts to freeway mainline segments or intersections with ramp termini, the Project's contribution to traffic growth and its effect on operating conditions were analyzed. It was conservatively assumed that the Project would significantly impact a freeway segment if the addition of Project traffic to these segments would increase the traffic volumes by more than 2%. Since the addition of Project traffic to these freeway mainline segments is less than 2%, the Project would have a less than significant impact on all freeway mainline segments under Existing with Project Conditions and Future with Project Conditions.

INTERSECTIONS

As shown in Table 13, this Caltrans analysis focuses on one unsignalized and 10 signalized freeway ramp locations at I-405, SR 91, and I-110.

As described in Chapter 7, as a result of potential significant impacts identified using County significance criteria, the Project identified mitigation measures that would reduce significant Project impacts to a less than significant level at the study intersections.

The intersections under Caltrans jurisdiction were further analyzed using the HCM methodology and implemented using the Vistro software. Table 18 summarizes the LOS definitions for signalized and unsignalized intersections under the HCM methodology.

Intersection Analysis

The analysis of year 2018 conditions was conducted using existing traffic volumes utilized for the Existing Conditions analysis as presented in the study. Future traffic volumes for year 2020 were developed by increasing the existing traffic volumes with both ambient growth (assumed to be 1% total) and Related Project traffic. Tables 19A and 19B, respectively, summarize the

results of the HCM analysis of Existing Conditions and Existing with Project Conditions at the signalized and unsignalized intersections. Tables 20A and 20B similarly summarize the results of the HCM analysis of Future without and with Project Conditions at the signalized and unsignalized intersections. The signalized ramp intersections are anticipated to operate at LOS C or better under all conditions, regardless of the addition of Project traffic. The unsignalized ramp intersection at Hamilton Avenue & I-110 Southbound Ramps is anticipated to operate at LOS E during the morning peak hour and LOS F during the afternoon peak hour under Existing Conditions and at LOS F during both morning and afternoon peak hours under Future Conditions, regardless of the addition of Project traffic. The Project was determined to have a significant impact without mitigation on this intersection under County significance criteria.

OFF-RAMP QUEUES

Three freeway off-ramps along I-405, three freeway off-ramps along SR 91, and three freeway off-ramps along I-110 were analyzed to determine whether the lengths of the ramps were sufficient to accommodate vehicle queue lengths. The queue lengths were estimated using Vistro, which reports the 95th percentile queue length for each approach lane on the off-ramp.

The assessment of the off-ramps included a review of the vehicle queue length as compared to the total available queuing capacity of the ramp to determine whether the vehicle queue would extend beyond the length of the ramp onto the mainline. To this end, the queuing analysis looked at two separate components of ramp capacity: the length of each approach lane to the intersection and the remaining length of the ramp, behind any approach lane delineation lines, to the gore point where the ramp diverges from the freeway mainline. The queue may exceed the striped length of a given approach lane, but as long as there is sufficient additional queuing capacity on the ramp, it will not spill over onto the mainline.

Off-Ramp Queue Analysis

The analysis of year 2018 was conducted using the existing traffic volumes utilized for the Existing Conditions analysis. Table 21 summarizes the results of the queuing analysis for Existing Conditions and Existing with Project Conditions for year 2018. Future traffic volumes for

year 2020 traffic volumes were developed by increasing the existing traffic volumes by both ambient growth (assumed to be 1% total) and Related Project traffic. Table 22 summarizes the results of the queuing analysis for Future without Project Conditions and Future with Project Conditions for year 2020. The queues at all eight off-ramps do not extend beyond the available capacity under all conditions, without and with the addition of Project traffic. The addition of Project traffic does not substantially increase the off-ramp queue under any of the conditions tested above (less than one vehicle length during any of the scenarios tested) with exception of the SR 91 eastbound off-ramp at Albertoni Street during the morning peak hour, where the Project would increase the off-ramp queues by six vehicle lengths in the left-turn lane and seven vehicles lengths in the right-turn lane. However, the increased queues are not projected to exceed the existing storage lane capacities. Therefore, the Project would have a less-than-significant impact on off-ramp queuing.

TABLE 13
ANALYZED CALTRANS FACILITIES

ID	Location
Freeway Mainline Segments	
FS-1.	SR 91 Between I-110 and Avalon Boulevard
FS-2.	SR 91 Between Avalon Boulevard and Central Avenue
FS-3.	SR 91 Between Central Avenue and Wilmington Avenue
FS-4.	I-110 Between Carson Street and Torrance Boulevard
FS-5.	I-110 Between Torrance Boulevard and I-405
FS-6.	I-110 Between I-405 and SR 91
FS-7.	I-110 Between SR-91 and Redondo Beach Boulevard
FS-8.	I-405 Between Wilmington Avenue & Carson Street
FS-9.	I-405 Between Carson Street and Avalon Boulevard
FS-10.	I-405 Between Avalon Boulevard and I-110
FS-11.	I-405 Between I-110 and Vermont Avenue
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue
FS-13.	I-405 Between Normandie Avenue and Western Avenue
Signalized Ramp Intersections	
S-1.	Main Street & I-405 NB Off-Ramp (Intersection #2)
S-2.	Main Street & I-405 SB Off-Ramp (Intersection #3)
S-3.	Avalon Boulevard & SR 91 WB On-Ramp (Intersection #6)
S-4.	Avalon Boulevard & I-405 NB Ramps (Intersection #15)
S-5.	Avalon Boulevard & I-405 SB Ramps (Intersection #16)
S-6.	Main Street & SR 91 WB Ramps (Intersection #17)
S-7.	I-110 NB On-Ramp & 190th St (Intersection #21)
S-8.	I-110 SB Off-Ramp & 190th Street (Intersection #22)
S-9.	Figueroa Street & I-110 NB Ramps (Intersection #27)
S-10.	SR 91 EB Ramps & Albertoni Street (Intersection #28)
Unsignalized Ramp Intersections	
U-1.	Hamilton Avenue & I-110 SB Ramps (Intersection #25)
Off-Ramp Queues	
Q-1.	I-405 Northbound Off-Ramp to Main Street (Intersection #2)
Q-2.	I-405 Northbound Off-Ramp to Avalon Boulevard (Intersection #15)
Q-3.	I-405 Southbound Off-Ramp to Avalon Boulevard (Intersection #16)
Q-4.	SR 91 Westbound Off-Ramp to Main Street (Intersection #17)
Q-5.	I-110 Southbound Off-Ramp to 190th Street (Intersection #22)
Q-6.	I-110 Southbound Off-Ramp to Hamilton Avenue (Intersection #25)
Q-7.	I-110 Northbound Off-Ramp to Figueroa Street (Intersection #27)
Q-8.	SR 91 Eastbound Off-Ramp to Albertoni Street (Intersection #28)

TABLE 14
LEVEL OF SERVICE DEFINITIONS FOR FREEWAY SEGMENTS

Level of Service	Description	Density [a]
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 and ≤ 18
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 and ≤ 26
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 and ≤ 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 and ≤ 45
F	Represents a breakdown in flow and oversaturated conditions.	> 45

Notes

Source: *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016) and Caltrans.

[a] Density is defined in vehicles per mile per lane and describes the proximity to other vehicles and is related to the freedom to maneuver within the traffic stream (*Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis).*

TABLE 15
FREEWAY MAINLINE SEGMENT TRAFFIC VOLUMES

ID	Freeway Mainline Segment	Peak Hour	Direction	Vehicles per Hour (VPH)			
				Existing Conditions (Year 2018) [a]	Existing with Project Conditions (Year 2018)	Future without Project Conditions (Year 2020)	Future with Project Conditions (Year 2020)
FS-1.	SR-91 Between I-110 and Avalon Boulevard	AM Peak Hour	EB	5282	5302	5297	5317
			WB	8467	8483	8489	8505
		PM Peak Hour	EB	7649	7695	7663	7709
			WB	6299	6336	6348	6385
FS-2.	SR-91 Between Avalon Boulevard and Central Avenue	AM Peak Hour	EB	5390	5395	5396	5401
			WB	8638	8644	8655	8661
		PM Peak Hour	EB	7804	7816	7850	7862
			WB	6427	6442	6451	6466
FS-3.	SR-91 Between Central Avenue and Wilmington Avenue	AM Peak Hour	EB	5497	5502	5503	5508
			WB	8810	8816	8873	8879
		PM Peak Hour	EB	7960	7972	8006	8018
			WB	6555	6570	6621	6636
FS-4.	I-110 Between Carson Street and Torrance Boulevard	AM Peak Hour	NB	9027	9034	9078	9085
			SB	6645	6651	6693	6699
		PM Peak Hour	NB	6293	6310	6379	6396
			SB	8686	8700	8771	8785
FS-5.	I-110 Between Torrance Boulevard and I-405	AM Peak Hour	NB	9548	9548	9643	9643
			SB	7028	7028	7115	7115
		PM Peak Hour	NB	6656	6656	6815	6815
			SB	9187	9187	9377	9377
FS-6.	I-110 Between I-405 and SR 91	AM Peak Hour	NB	11761	11765	11862	11866
			SB	8658	8663	8801	8806
		PM Peak Hour	NB	8198	8208	8395	8405
			SB	11317	11329	11531	11543
FS-7.	I-110 Between SR-91 and Redondo Beach Boulevard	AM Peak Hour	NB	10503	10518	10638	10653
			SB	7731	7736	7867	7872
		PM Peak Hour	NB	7321	7356	7584	7619
			SB	10106	10118	10320	10332

TABLE 15 (CONTINUED)
FREEWAY MAINLINE SEGMENT TRAFFIC VOLUMES

ID	Freeway Mainline Segment	Peak Hour	Direction	Vehicles per Hour (VPH)			
				Existing Conditions (Year 2018) [a]	Existing with Project Conditions (Year 2018)	Future without Project Conditions (Year 2020)	Future with Project Conditions (Year 2020)
FS-8.	I-405 Between Wilmington Avenue & Carson Street	AM Peak Hour	NB	8989	8999	9129	9139
			SB	7375	7383	7447	7455
		PM Peak Hour	NB	8181	8206	8435	8460
			SB	9330	9349	9471	9490
FS-9.	I-405 Between Carson Street and Avalon Boulevard	AM Peak Hour	NB	8850	8860	8968	8978
			SB	7261	7269	7333	7341
		PM Peak Hour	NB	8054	8079	8309	8334
			SB	9185	9204	9326	9345
FS-10.	I-405 Between Avalon Boulevard and I-110	AM Peak Hour	NB	9477	9479	9563	9565
			SB	7776	7778	7863	7865
		PM Peak Hour	NB	8625	8629	8718	8722
			SB	9836	9841	10015	10020
FS-11.	I-405 Between I-110 and Vermont Avenue	AM Peak Hour	NB	9581	9583	9667	9669
			SB	7861	7863	7937	7939
		PM Peak Hour	NB	8720	8724	8813	8817
			SB	9945	9950	10091	10096
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue	AM Peak Hour	NB	9930	9932	10016	10018
			SB	8147	8149	8223	8225
		PM Peak Hour	NB	9037	9041	9130	9134
			SB	10306	10311	10452	10457
FS-13.	I-405 Between Normandie Avenue and Western Avenue	AM Peak Hour	NB	9303	9305	9389	9391
			SB	7633	7635	7709	7711
		PM Peak Hour	NB	8467	8471	8560	8564
			SB	9655	9660	9801	9806

Notes
[a] Existing traffic volume based on average weekday peak hour data from *2017 Traffic Volumes on California State Highways (Caltrans; 2018).*

TABLE 16
EXISTING CONDITIONS (YEAR 2018)
FREEWAY SEGMENT LEVEL OF SERVICE ANALYSIS

ID	Freeway Segment	Peak Hour	Direction	Existing Conditions			Existing with Project Conditions		
				Speed [a][b]	Density [b][c]	LOS	Speed [a][b]	Density [b][c]	LOS
FS-1.	SR 91 Between I-110 and Avalon Boulevard	AM	EB	64	18	B	64	18	B
			WB	62	30	D	62	30	D
		PM	EB	63	26	D	63	26	D
			WB	64	21	C	64	21	C
FS-2.	SR 91 Between Avalon Boulevard and Central Avenue	AM	EB	64	18	C	64	18	C
			WB	61	31	D	61	31	D
		PM	EB	63	27	D	63	27	D
			WB	64	22	C	64	22	C
FS-3.	SR 91 Between Central Avenue and Wilmington Avenue	AM	EB	64	19	C	64	19	C
			WB	61	32	D	61	32	D
		PM	EB	63	28	D	63	28	D
			WB	64	22	C	64	22	C
FS-4.	I-110 Between Carson Street and Torrance Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	62	29	D	62	29	D
		PM	NB	63	27	D	63	27	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-5.	I-110 Between Torrance Boulevard and I-405	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	61	31	D	61	31	D
		PM	NB	62	29	D	62	29	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-6.	I-110 Between I-405 and SR 91	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
		PM	NB	55	41	E	55	41	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-7.	I-110 Between SR 91 and Redondo Beach Boulevard	AM	NB	54	43	E	54	43	E
			SB	63	27	D	63	27	D
		PM	NB	64	25	C	64	25	C
			SB	56	39	E	56	40	E
FS-8.	I-405 Between Wilmington Avenue & Carson Street	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	59	34	D	59	34	D
		PM	NB	55	40	E	55	41	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-9.	I-405 Between Carson Street and Avalon Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	60	33	D	60	33	D
		PM	NB	56	39	E	56	39	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-10.	I-405 Between Avalon Boulevard and I-110	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	37	E	57	37	E
		PM	NB	52	45	E	52	45	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-11.	I-405 Between I-110 and Vermont Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	37	E	57	37	E
		PM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue	AM	NB	57	38	E	57	38	E
			SB	55	40	E	55	40	E
		PM	NB	60	33	D	60	33	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-13.	I-405 Between Normandie Avenue and Western Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	58	36	E	58	36	E
		PM	NB	53	43	E	53	43	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F

Notes

Overflow: Traffic demand exceeds the available capacity of the freeway mainline segment .

[a] Mean speed measured in miles per hour (mph).

[b] Methodology from *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016).

[c] Measured in vehicles per mile per lane (v/m/l) for freeways with a free-flow speed of 58.2 mph. Free-flow speed, as defined in HCM 6th Edition, is the theoretical speed when the density and flow rate of the freeway mainline segment are both zero.

TABLE 17
FUTURE CONDITIONS (YEAR 2020)
FREEWAY SEGMENT LEVEL OF SERVICE ANALYSIS

ID	Freeway Segment	Peak Hour	Direction	Future without Project Conditions			Future with Project Conditions		
				Speed [a][b]	**Density** [b][c]	**LOS**	**Speed** [a][b]	**Density** [b][c]	**LOS**
FS-1.	SR 91 Between I-110 and Avalon Boulevard	AM	EB	64	18	B	64	18	B
			WB	62	30	D	62	30	D
		PM	EB	63	26	D	63	26	D
			WB	64	22	C	64	22	C
FS-2.	SR 91 Between Avalon Boulevard and Central Avenue	AM	EB	64	18	C	64	18	C
			WB	61	31	D	61	31	D
		PM	EB	63	27	D	63	27	D
			WB	64	22	C	64	22	C
FS-3.	SR 91 Between Central Avenue and Wilmington Avenue	AM	EB	64	19	C	64	19	C
			WB	61	32	D	61	32	D
		PM	EB	63	28	D	63	28	D
			WB	64	22	C	64	22	C
FS-4.	I-110 Between Carson Street and Torrance Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	62	29	D	62	29	D
		PM	NB	63	28	D	63	28	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-5.	I-110 Between Torrance Boulevard and I-405	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	61	32	D	61	32	D
		PM	NB	62	30	D	62	30	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-6.	I-110 Between I-405 and SR 91	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
		PM	NB	54	42	E	54	43	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-7.	I-110 Between SR 91 and Redondo Beach Boulevard	AM	NB	53	44	E	53	44	E
			SB	63	27	D	63	27	D
		PM	NB	64	26	C	64	26	C
			SB	55	41	E	55	41	E
FS-8.	I-405 Between Wilmington Avenue & Carson Street	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	59	34	D	59	34	D
		PM	NB	53	43	E	53	43	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-9.	I-405 Between Carson Street and Avalon Boulevard	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	60	33	D	60	33	D
		PM	NB	54	42	E	54	42	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-10.	I-405 Between Avalon Boulevard and I-110	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	37	E	57	37	E
		PM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-11.	I-405 Between I-110 and Vermont Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	57	38	E	57	38	E
		PM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-12.	I-405 Between Vermont Avenue and Normandie Avenue	AM	NB	56	39	E	56	39	E
			SB	55	41	E	55	41	E
		PM	NB	60	33	D	60	33	D
			SB	Overflow	Overflow	F	Overflow	Overflow	F
FS-13.	I-405 Between Normandie Avenue and Western Avenue	AM	NB	Overflow	Overflow	F	Overflow	Overflow	F
			SB	58	36	E	58	36	E
		PM	NB	53	44	E	53	44	E
			SB	Overflow	Overflow	F	Overflow	Overflow	F

Notes

Overflow: Traffic demand exceeds the available capacity of the freeway mainline segment .

[a] Mean speed measured in miles per hour (mph).

[b] Methodology from *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis*(Transportation Research Board, 2016).

[c] Measured in vehicles per mile per lane (v/m/l) for freeways with a free-flow speed of 58.2 mph. Free-flow speed, as defined in HCM 6th Edition, is the theoretical speed when the density and flow rate of the freeway mainline segment are both zero.

TABLE 18
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS- HIGHWAY CAPACITY MANUAL

Level of Service	Description	Delay [a]	
		Signalized Intersections	Unsignalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10	≤ 10
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20	> 10 and ≤ 15
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35	> 15 and ≤ 25
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	> 35 and ≤ 55	> 25 and ≤ 35
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	> 55 and ≤ 80	> 35 and ≤ 50
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80	> 50

Notes

Source: *Highway Capacity Manual, 6th Edition, A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2016).

[a] Measured in seconds.

TABLE 19A
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
SIGNALIZED INTERSECTION LEVELS OF SERVICE ANALYSIS

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions	
			Delay	LOS	Delay	LOS
S-1.	Main Street & I-405 NB Off-Ramp (Intersection #2)	A.M. P.M.	11.0 11.5	B B	11.1 12.0	B B
S-2.	Main Street & I-405 SB On-Ramp (Intersection #3)	A.M. P.M.	7.7 13.0	A B	7.8 13.3	A B
S-3.	Avalon Boulevard & SR-91 WB On-Ramp (Intersection #6)	A.M. P.M.	8.7 8.2	A A	8.8 8.2	A A
S-4.	Avalon Boulevard & I-405 NB Ramps (Intersection #15)	A.M. P.M.	15.4 7.7	B A	15.5 7.7	B A
S-5.	Avalon Boulevard & I-405 SB Ramps (Intersection #16)	A.M. P.M.	13.7 7.6	B A	13.7 7.6	B A
S-6.	Main Street & SR-91 WB Ramps (Intersection #17)	A.M. P.M.	13.7 12.9	B B	13.8 13.1	B B
S-7.	I-110 NB On-Ramp & 190th Street (Intersection #21)	A.M. P.M.	6.7 7.5	A A	6.7 7.5	A A
S-8.	I-110 SB Off-Ramp & 190th Street (Intersection #22)	A.M. P.M.	13.1 12.1	B B	13.3 12.3	B B
S-9.	Figueroa Street & I-110 NB Ramps (Intersection #27)	A.M. P.M.	15.8 15.7	B B	15.9 15.9	B B
S-10.	SR-91 EB Ramps & Albertoni Street (Intersection #28)	A.M. P.M.	12.3 11.7	B B	12.4 11.8	B B

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro 5 (HCM 6th Edition methodology).

TABLE 19B
EXISTING WITH PROJECT CONDITIONS (YEAR 2018)
UNSIGNALIZED INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions	
			Delay	LOS	Delay	LOS
U-1. [a]	Hamilton Avenue & I-110 SB Ramps (Intersection #25)	A.M. P.M.	40.0 81.8	E F	40.6 86.7	E F

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro (HCM 6th Edition methodology).

[a] Intersection is uncontrolled.

TABLE 20A
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
SIGNALIZED INTERSECTION LEVELS OF SERVICE ANALYSIS

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
S-1.	Main Street & I-405 NB Off-Ramp (Intersection #2)	A.M. P.M.	11.4 13.4	B B	11.6 14.3	B B
S-2.	Main Street & I-405 SB On-Ramp (Intersection #3)	A.M. P.M.	7.9 14.2	A B	8.0 14.6	A B
S-3.	Avalon Boulevard & SR-91 WB On-Ramp (Intersection #6)	A.M. P.M.	9.3 8.8	A A	9.3 8.9	A A
S-4.	Avalon Boulevard & I-405 NB Ramps (Intersection #15)	A.M. P.M.	20.4 9.3	C A	20.6 9.3	C A
S-5.	Avalon Boulevard & I-405 SB Ramps (Intersection #16)	A.M. P.M.	17.8 9.6	B A	17.7 9.7	B A
S-6.	Main Street & SR-91 WB Ramps (Intersection #17)	A.M. P.M.	14.3 13.4	B B	14.4 13.6	B B
S-7.	I-110 NB On-Ramp & 190th Street (Intersection #21)	A.M. P.M.	6.8 7.7	A A	6.8 7.8	A A
S-8.	I-110 SB Off-Ramp & 190th Street (Intersection #22)	A.M. P.M.	14.9 13.3	B B	15.1 13.5	B B
S-9.	Figueroa Street & I-110 NB Ramps (Intersection #27)	A.M. P.M.	17.4 17.3	B B	17.5 17.6	B B
S-10.	SR-91 EB Ramps & Albertoni Street (Intersection #28)	A.M. P.M.	12.6 11.9	B B	12.8 12.0	B B

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro 5 (HCM 6th Edition methodology).

TABLE 20B
FUTURE WITH PROJECT CONDITIONS (YEAR 2020)
UNSIGNALIZED INTERSECTION LEVELS OF SERVICE ANALYSIS

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
U-1. [a]	Hamilton Avenue & I-110 SB Ramps (Intersection #25)	A.M. P.M.	59.3 131.0	F F	60.2 136.8	F F

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Vistro (HCM 6th Edition methodology).

[a] Intersection is uncontrolled.

TABLE 21
EXISTING OPERATING CONDITIONS (YEAR 2018)
FREEWAY OFF-RAMP QUEUE ANALYSIS

ID	Freeway Off-Ramp	Ramp and Lane Description	Adjusted Vehicle Storage Capcity [a]	Existing Conditions				Existing with Project Conditions			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?
Q-1.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Main Street	Shared Left/Through	405	94		64		98		66	
	(Intersection #2)	Shared Through/Right	405	79		96		82		106	
		Ramp	400	0	NO	0	NO	0	NO	0	NO
Q-2.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Avalon Boulevard	Left	150	9		15		9		15	
	(Intersection #15)	Shared Left/Through	125	9		15		9		15	
		Right (Channelized)	125	0		0		0		0	
		Ramp	455	0	NO	0	NO	0	NO	0	NO
Q-3.	I-405 Southbound Off-Ramp to	I-405 Southbound Off-Ramp									
	Avalon Boulevard	Left	385	35		29		36		30	
	(Intersection #16)	Left	925	35		29		36		30	
		Through	925	1		0		0		0	
		Through	250	1		0		0		0	
		Right (Channelized)	--	0		0		0		0	
		Ramp	885	0	NO	0	NO	0	NO	0	NO
Q-4.	SR 91 Westbound Off-Ramp to	SR 91 Westbound Off-Ramp									
	Main Street	Left	490	134		61		138		65	
	(Intersection #17)	Right	490	118		97		120		100	
		Ramp	1,035	0	NO	0	NO	0	NO	0	NO
Q-5.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	190th Street	Left	295	34		101		36		110	
	(Interseciton #22)	Right	295	208		189		212		194	
		Ramp	2,235	0	NO	0	NO	0	NO	0	NO
Q-6.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	Hamilton Avenue	Left	355	324		57		326		57	
	(Interseciton #25)	Shared Left/Right	355	265		50		267		50	
		Ramp	540	0	NO	0	NO	0	NO	0	NO
Q-7.	I-110 Northbound Off-Ramp to	I-110 Northbound Off-Ramp									
	Figueroa Street	Left	300	168		121		170		127	
	(Intersection #27)	Shared Left/Right	355	164		114		166		120	
		Ramp	550	0	NO	0	NO	0	NO	0	NO
Q-8.	SR 91 Eastbound Off-Ramp to	SR 91 Eastbound Off-Ramp									
	Albertoni Street	Left	885	79		197		197		197	
	(Intersection #28)	Right	885	63		197		197		197	
		Ramp	350	0	NO	0	NO	0	NO	0	NO

[a] Storage length capacity is the distance from the freeway mainline gore point to the terminus of the off-ramp, expressed in feet.
[b] 95th Percentile queue results per Vistro 5 (HCM 6th Edition Methodology).

TABLE 22
FUTURE OPERATING CONDITIONS (YEAR 2020)
FREEWAY OFF-RAMP QUEUE ANALYSIS

ID	Freeway Off-Ramp	Ramp and Lane Description	Adjusted Vehicle Storage Capcity [a]	Future without Project Conditions				Future with Project Conditions			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?	Vehicle Queue Length [b]	Exceeds Capacity?
Q-1.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Main Street	Shared Left/Through	405	107		90		111		94	
	(Intersection #2)	Shared Through/Right	405	90		125		93		137	
		Ramp	400	0	NO	0	NO	0	NO	0	NO
Q-2.	I-405 Northbound Off-Ramp to	I-405 Northbound Off-Ramp									
	Avalon Boulevard	Left	150	16		43		16		43	
	(Intersection #15)	Shared Left/Through	125	16		43		16		43	
		Right (Channelized)	125	0		0		0		0	
		Ramp	455	0	NO	0	NO	0	NO	0	NO
Q-3.	I-405 Southbound Off-Ramp to	I-405 Southbound Off-Ramp									
	Avalon Boulevard	Left	385	51		58		51		59	
	(Intersection #16)	Left	925	51		58		51		59	
		Through	925	3		0		0		0	
		Through	250	3		0		0		0	
		Right (Channelized)	--	0		0		0		0	
		Ramp	885	0	NO	0	NO	0	NO	0	NO
Q-4.	SR 91 Westbound Off-Ramp to	SR 91 Westbound Off-Ramp									
	Main Street	Left	490	153		73		158		76	
	(Intersection #17)	Right	490	127		108		129		111	
		Ramp	1,035	0	NO	0	NO	0	NO	0	NO
Q-5.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	190th Street	Left	295	50		153		52		164	
	(Interseciton #22)	Right	295	262		215		267		219	
		Ramp	2,235	0	NO	0	NO	0	NO	0	NO
Q-6.	I-110 Southbound Off-Ramp to	I-110 Southbound Off-Ramp									
	Hamilton Avenue	Left	355	355		123		355		123	
	(Interseciton #25)	Shared Left/Right	355	355		95		355		95	
		Ramp	540	95	NO	0	NO	99	NO	0	NO
Q-7.	I-110 Northbound Off-Ramp to	I-110 Northbound Off-Ramp									
	Figueroa Street	Left	300	198		159		200		165	
	(Intersection #27)	Shared Left/Right	355	196		151		199		158	
		Ramp	550	0	NO	0	NO	0	NO	0	NO
Q-8.	SR 91 Eastbound Off-Ramp to	SR 91 Eastbound Off-Ramp									
	Albertoni Street	Left	885	83		197		197		197	
	(Intersection #28)	Right	885	85		197		197		197	
		Ramp	350	0	NO	0	NO	0	NO	0	NO

[a] Storage length capacity is the distance from the freeway mainline gore point to the terminus of the off-ramp, expressed in feet.
[b] 95th Percentile queue results per Vistro 5 (HCM 6th Edition Methodology).

Chapter 11
Site Access and Internal Circulation

This chapter summarizes the site access and internal circulation of the Project site.

SITE ACCESS

As described in Chapter 1, primary site access is provided by new driveways located on Martin Luther King, Jr. Street and on Avalon Boulevard at Elsmere Drive; secondary access is provided by another new driveway on Avalon Boulevard, south of Martin Luther King, Jr. Street.

Primary Access

Both the Martin Luther King, Jr. Street and Avalon Boulevard at Elsmere Drive driveways will provide primary site access at all times at full build-out.

The Martin Luther King, Jr. Street driveway will be effectively located at the northwestern corner of the Project site. The driveway will provide two inbound lanes with two outbound lanes configured as separate left-turn and right-turn lanes. Improvements to Martin Luther King, Jr. Street will include the installation of a new traffic signal, along with an eastbound right-turn lane and westbound left-turn lane. Full access to the Project site will be available through this driveway, along with the parking and loading/unloading activities associated with those uses.

The Avalon Boulevard at Elsmere Drive driveway will form the new west leg of the existing signalized intersection at Avalon Boulevard & Elsmere Drive. The driveway will provide two inbound lanes with two outbound lanes configured as separate left-turn and right-turn lanes; eastbound through traffic to Elsmere Drive will be restricted. Improvements to Avalon Boulevard, as part of the new driveway, include the installation of a second northbound left-turn

lane. At full build-out, full access to the Soccer Center will be available through this driveway, along with the associated parking and loading/unloading activities.

Secondary Access

A new driveway on Avalon Boulevard, south of Martin Luther King, Jr. Street will provide secondary access to the Project site with one inbound and one outbound lane controlled by a stop sign; this driveway is limited to right-turn in and out access only. As a secondary access point, the driveway will be restricted to employee use only during typical daily operations.

Event Access

Access to the Project site on days with special events will be guided by the SEMP. In general, both the primary driveways and secondary driveway will be open to all users during events.

INTERNAL CIRCULATION

Within the Project site, internal circulation is limited to the respective sides of the Learning Center, Tennis Center and Soccer Center. The Martin Luther King, Jr. Street driveway provides a drive aisle into the site with direct access to the Learning Center and Tennis Center. In addition, this drive aisle provides shared access into the northern portion of The Creek. To accommodate this functionality with The Creek, it is anticipated that the drive aisle will be comprised of a four-lane cross section through the Project site (generally between The Creek and the Martin Luther King, Jr. Street driveway). The drive aisle may be equipped to operate with reversible lanes, per the SEMP or when determined operationally necessary (i.e., unanticipated high traffic volumes on-site or from The Creek).

Along Avalon Boulevard, the two daily use parking lots and the two overflow parking lots will be designed to allow internal linkages (i.e., continuous drive aisles) that may be closed during daily operations and opened by the SEMP.

BICYCLE AND PEDESTRIAN ACCESS

It is anticipated that bicycle/pedestrian access gates will be provided along the public sidewalks into the Project site located near the activity centers. Bicycle parking is also anticipated to be located either near the access gates or the Project's activity centers.

In addition, access points between the Project and The Creek are anticipated along the shared portions of the perimeter fencing. These specific locations have not been finalized but are anticipated to be strategically located near the key activity centers between the two sites.

Chapter 12
Parking Analysis

This chapter provides an analysis of the off-street parking requirements in relation to the Project's proposed parking supply.

As described in Chapter 1, the total Project parking supply consists of 1,547 spaces located in on-site surface parking lots across the Project site. The parking supply is comprised of 692 marked spaces in three parking lots with another 855 spaces designated for overflow use, when necessary[8].

OFF-STREET PARKING RATES

The off-street parking requirements of the Project were identified using the applicable parking rates established in Part 11, Chapter 22.52 of the Los Angeles County Zoning Ordinance (Zoning Ordinance). Other sources were utilized to develop the parking requirement for land uses not specifically identified in the Zoning Ordinance.

The parking rate for the Tennis Center is identified in Chapter 22.52.1177 of the Zoning Ordinance as two spaces per tennis court.

The parking rates for the Player Development Facility, Learning Center, and Administrative Office were derived from Chapter 22.52.1175 A 1 (c) for Public Parks[9], which requires one space per 400 square feet. This parking rate was conservatively applied to the Player Development Center and Learning Center, based on the anticipated operation of each use.

[8] Approximately 290 of the designated overflow spaces are located within the footprint of the proposed tennis exhibition court. When the tennis exhibition court is constructed, the removal of the 290 overflow spaces will result in a reduced parking supply of 1,257 spaces.

[9] Public parks less than 50 acres with other public buildings not including certain uses for which specific parking rates are provided per Chapter 22.52.1175 A 1(c).

The parking requirements of the Soccer Center were separated into weekday and weekend conditions, which respectively represent non-tournament and tournament operation. The respective parking requirements were derived from two sources: *Parking Generation, 4th Edition* (Institute of Transportation Engineers, 2010) and *Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex.*

- The weekday parking requirements were derived from *Parking Generation, 4th Edition* Land Use Code 488 – Soccer Center, which consists of non-professional soccer activities to accommodate different age groups and assumed as a non-tournament condition. This use is consistent with the described daily operation of the Project's Soccer Center. The parking rate of 38.3 spaces per field is used for typical weekday conditions.

- The weekend parking requirements were utilized from *Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex*, which developed a parking rate for weekend tournament conditions based on empirical parking demand data. The operating conditions of the Placer Valley Sports Complex are consistent with the described tournament operation of the Project's Soccer Center. The parking rate of 82 spaces per field is used for weekend tournament conditions.

The parking rate of the other recreational amenities was based on the parking requirements developed in *Center Avenue Skatepark Traffic Analysis*. A parking rate of 0.53 spaces per 1,000 sf was calculated from the reference material; this parking rate incorporates ancillary uses such as restrooms and support buildings.

PROJECT PARKING REQUIREMENTS

The parking rates described above were applied to the Project component, as follows:

- Tennis Center (62 courts): 124 spaces
- Player Development Facility (13,000 sf): 33 spaces
- Learning Center (25,000 sf): 63 spaces
- Administrative Office (5,000 sf): 13 spaces

- Soccer Center (10 fields): 383 spaces, weekday
820 spaces, weekend
- Other Recreational Amenities / Skatepark (43,560 sf): 23 spaces

The total weekday parking requirement is 639 spaces, with a total weekend parking requirement of 1,076 spaces.

PARKING ANALYSIS

As previously described, the total 1,547 space parking supply is comprised of 692 marked spaces in three surface parking lots that are available at all times and 855 spaces available for overflow use on weekends or when necessary.

The 639 spaces required for weekday use can be fully accommodated by the 692 marked spaces, with a surplus of approximately 53 spaces without the use of the overflow spaces.

The 1,076 spaces required for weekend use can be fully accommodated by the total 1,547 space parking supply, with a surplus of approximately 471 spaces with the use of the overflow parking.

Therefore, the Project parking supply is anticipated to adequately meet the parking requirements of the proposed uses on-site[10]. Table 23 summarizes the parking analysis findings.

[10] When the proposed tennis exhibition court is constructed, approximately 290 overflow parking spaces will be removed, reducing the overall supply to 1,257 spaces. However, the parking requirements will continue to be satisfied by the adjusted Project parking supply.

TABLE 23
OFF-STREET PARKING REQUIREMENTS

Parking Requirement	Parking Rates [a]		Unit		Required Parking
Proposed Uses					
Soccer Center - weekday [b]	38.3	per field	10	fields	383
Soccer Center - weekend [c]	82.0	per field			820
Skatepark [d]	0.53	per 1,000 sf	43,560	sf	23
Tennis Center [e]	2.00	per court	62	courts	124
Player Development Center [f]	1.0	per 400 sf	13,000	sf	33
Learning Center [f]	1.0	per 400 sf	25,000	sf	63
Administrative Office [f]	1.0	per 400 sf	5,000	sf	13
				Weekday Parking Requirement	639
				Weekend Parking Requirement	1,076
Total On-site Parking Supply [g]					**1,547**
Weekday parking (deficit)/surplus					908
Weekend parking (deficit)/surplus [h]					471

Notes:

Off-street parking requirements from Los Angeles County Zoning Ordinance or other source, as noted.

[b] Rate from *Parking Generation, 4th Edition* (ITE, 2010) for Land Use Code 488 - Soccer Center. The parking rate is demand based and representative of typical weekday (non-tournament) condition.

[c] Rate from *Placer Valley Sports Complex* (GTC, 2015). The parking rate was empirically derived and represents a weekend tournament condition.

[d] Rate from *Center Avenue Skatepark Traffic Analysis* (Austin-Foust Associates, 2011). The parking rate was empirically derived and includes ancillary uses that are not proposed with the CKSAC skatepark.

[e] LA County Zoning Ordinance 22.52.1177 - Tennis Courts

[f] LA County Zoning Ordinance 22.52.1175 A 1(c) - Public parks less than 50 acres with other public buildings not including certain uses for which specific parking rates are provided.

[g] The total on-site parking supply of 1,547 spaces includes 692 spaces in marked parking stalls with 855 spaces available for use as overflow, when necessary.

[h] Weekend parking surplus is based on a tournament condition at the Soccer Center and does not assume a simultaneous event/tournament at the Tennis Center.

Chapter 13
Summary and Conclusions

This study was undertaken to analyze the potential traffic impacts of the Project on the local street system. The following summarizes the results of this analysis:

- As the Project site is a County-owned property, the scope of analysis for this study was developed in consultation with the County.
- The Project, located on 87 acres at 340 Martin Luther King, Jr. Street, is proposed to include at full build-out:
    - The Learning Center, to be operated by the Tiger Woods Foundation, on approximately one acre with an up to 25,000 sf building
    - The Tennis Center, to be operated by the USTAF, located on approximately 28 acres with new buildings including approximately 41,000 sf for a Welcome Center, player development activities and administrative offices and up to 62 tennis courts of varying sizes and an exhibition court along with seating areas for up to 1,200 spectators
    - The Soccer Center, located on approximately 58 acres with 10 sports fields for soccer and other sporting uses, along with up to 10,000 sf of support building(s)
    - Additional recreational areas for community use
    - A total of 1,547 parking spaces in a combination of 692 regularly marked spaces in three surface parking lots and 855 unmarked spaces in overflow parking lots. When the proposed tennis exhibition court is constructed, approximately 290 overflow parking spaces will be removed, reducing the overall supply to 1,257 spaces.
- Primary site access will be provided by new driveways on Martin Luther King, Jr. Street and on Elsmere Drive at Avalon Boulevard, along with a new limited access driveway on Avalon Boulevard.
- The Project is proposed to be completed in 2020.
- A total of 31 intersections were selected for analysis with input from the County, Caltrans, and the City of Carson. Analysis scenarios, as required by the County, included:
    - Existing Conditions (Year 2018)
    - Existing with Project Conditions (Year 2018)

- Future with Project conditions (Year 2020)

- The weekday analysis, representative of typical operating conditions, was conducted for the morning and afternoon peak periods. The Saturday analysis, representative of regular tournament operations, was conducted for the mid-day period in a focused 17-intersection study area. The underlying assumptions of the analysis conditions are consistent with County requirements.

- The Existing with Project conditions analysis indicates that three signalized intersections would be significantly impacted with the addition of Project traffic before mitigation during weekday conditions. No Saturday impacts were identified. An additional unsignalized intersection was significantly impacted based on meeting signal warrant criteria under the weekday condition. Mitigation measures were developed to reduce the Project impacts to a less than significant level. These intersections and their mitigations, discussed in more detail in this report, include:

    7. Avalon Boulevard & Albertoni Street: add second northbound left-turn lane

    18. Main Street & Albertoni Street: add eastbound right-turn lane

    19. Main Street & Victoria Street: add eastbound right-turn lane

    25. Hamilton Avenue & I-110 Southbound Ramps: reconfigure southbound approach left-turn and shared left-turn/through lane and install new signal

- The Future with Project Conditions analysis projects a total of 14 intersections to be significantly impacted by the addition of Project traffic and cumulative growth (13 during weekday conditions and three during Saturday conditions, of which two were previously identified in the weekday conditions). Mitigation measures were identified to reduce the significant impacts, where feasible. These intersections and their mitigations, discussed in more detail in this report, include:

    1. Main Street & Martin Luther King, Jr Street: reconfigure westbound approach lanes and add northbound right-turn lane

    3. Main Street & I-405 Southbound Off-ramp: reconfigure eastbound approach lanes

    4. Main Street & Del Amo Boulevard: add northbound right-turn lane and westbound left-turn lane, modify signal phasing

    7. Avalon Boulevard & Albertoni Street: same as Project mitigation above

    8. Avalon Boulevard & Victoria Street: reconfigure eastbound approach lanes

    10. Avalon Boulevard & University Drive: reconfigure westbound approach lanes

    14. Avalon Boulevard & Del Amo Boulevard: modify northbound median to add second northbound left-turn lane, reconfigure southbound and eastbound approach lanes

16. Avalon Boulevard & I-405 Southbound ramps: modify signal phasing and upgrade equipment

18. Main Street & Albertoni Street: same as Project mitigation above

19. Main Street & Victoria Street: same as Project mitigation above

22. I-110 Southbound ramp & 190th Street: reconfigure eastbound approach lanes

24. Hamilton Avenue & Del Amo Boulevard: reconfigure northbound approach lanes and modify signal phasing

25. Hamilton Avenue & I-110 Southbound Ramps: same as Project mitigation above

26. Figueroa Street & Del Amo Boulevard: reconfigure westbound approach and modify signal phasing

- Of the 14 intersections identified above, nine are mitigated to less than significant levels. The following five intersections would remain residually impacted (four during weekday conditions and two during Saturday conditions, of which one is already identified during the weekday):

    4. Main Street & Del Amo Boulevard – weekday afternoon

    14. Avalon Boulevard & Del Amo Boulevard – weekday morning and Saturday mid-day

    16. Avalon Boulevard & I-405 Southbound ramps – Saturday mid-day

    18. Main Street & Albertoni Street – weekday afternoon

    19. Main Street & Victoria Street – weekday afternoon

- Many of the intersections and mitigation measures require the review and approval of other jurisdictions such as Caltrans, the City of Carson and City of Los Angeles.

- Supplemental analyses using the Caltrans and City of Carson methodologies were conducted for informational purposes and respectively, did not identify any additional potentially impacted locations beyond those already identified through the County analysis.

- Special events may be held occasionally at the Project site. A Special Event Management Plan will guide on-site traffic operation; specific measures from the Special Event Management Plan will be implemented on a tiered approach and based on certain usage thresholds.

- The proposed parking supply meets County zoning requirements on weekdays and during typical operations without the use of overflow parking and on weekends and during tournament operations with the use of the on-site overflow parking.

References

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2010 Bicycle Plan, Los Angeles Department of City Planning, 2010.

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California Transportation Plan 2040, California Department of Transportation, June 2016.

California Manual on Uniform Traffic Control Devices, California Department of Transportation, 2012.

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Mobility Plan 2035, An Element of the General Plan, Los Angeles Department of City Planning, January 2016.

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References, cont.

Trip Generation, 9th Edition, Institute of Transportation Engineers, 2012.

Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017.

Trip Generation, Parking, and Gate Control Strategies for the Placer Valley Sports Complex, Roseville, California, Gibson Transportation Consulting, Inc., November 25, 2015.

Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025, City of Los Angeles, August 2015.

Appendix A

Memorandum of Understanding

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

This Memorandum of Understanding (MOU) acknowledges Los Angeles County Department of Public Works, Traffic and Lighting Division (TLD) requirements of traffic impact analysis for the project and is subject to change:

Project Address:	340 E. MLK Jr Street, Carson, CA 90746		
Project Description:	The proposed project would develop a sports and academic campus on approximately 87 acres of the existing Victoria Golf Course site, including an up to 23,000 sq ft welcome center, 25,000 sq ft. learning center, 13, 000 sq ft. player development building, 62 tennis courts of varying sizes, an exhibition court and spectator areas, 10 soccer/multi-purpose fields, 5,000 sq ft administration building, and other recreational amenities.		
City:	Carson		
Project Build-out Year:	2020	**Notice of Preparation/Start of Env. Analysis:**	
Closest Intersection (Xtn) to the Project			
Xtn N/S Street Name:	Avalon Boulevard		
Xtn E/W Street Name:	Elsmere Drive		
Thomas Guide Pg+Grid:	Refer to Figure 1	**Los Angeles County Supervisorial District:**	2

	Consultant	**Developer**
Company:	Gibson Transportation and Consulting, Inc.	
Name:	Eugene Tang	
Address:	555 W. 5th Street	
City, State, Zip Code:	Los Angeles, CA, 90013	
Phone #:	213-683-0088	
Fax #:		
Email:	etang@gibsontrans.com	

By:	**Reviewed By:** Sean Ryan
Print Name: Eugene Tang	**Print Name:** Sean Ryan, PE
Phone: 213-683-0088	**Phone:** 626-300-4851
Email: etang@gibsontrans.com **2/14/19**	**Email:** sryan@dpw.lacounty.gov 3/5/2019

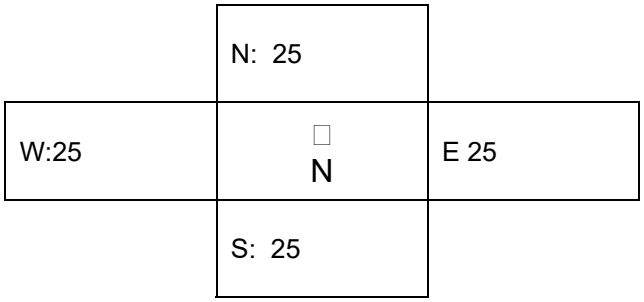
For General Questions, please contact Traffic Studies Section at (626) 300-4740

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

Consultant/Developer's Representative	**Date**	**TLD's Representative**	**Date**

1. Traffic Distribution: Figure(s) illustrating project trip distribution in percentages and volumes at the studied intersections analyzed. **[Shown in Figures 2&3]**



Trip Credit/Reduction: Exact amount of credit subject to approval by TLD.

Existing Active Land Use Credit	Yes	
Previous Land Use Credit	No	
Internal Trip Reduction	No	
Retail Pass-by Trip Reduction (10%)	No	

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

2. Trip Generation

Trip Generation Rate(s) Source: ITE Trip Generation	**I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other:**		

	Land Use Description (Code)	**Trip Generation Source**	***AVTE vs.**	**Quantity**	**Daily Trips Generated**	**Weekday a.m. peak**		**Weekday p.m. peak**		**Weekend peak hour**	
						In	**Out**	**In**	**Out**	**In**	**Out**
	Please see Table 1 for Trip Generation										

* - Average Vehicle Trip Ends.

SCOPING FOR TRAFFIC STUDY

Project Name:	The Carol Kimmelman Sports and Academic Campus

3. Study Intersections: At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	Jurisdictional Split	Thomas Guide Page+Grid	N/S and E/W Street Names	Signalized	CMP
1			Please see Table 2 for Study Intersections		
2					
3					
4					
5					
6					
7					
8					
9					
10					

Agencies to be contacted: City of Los Angeles, City of Carson, Caltrans

For General Questions, please contact Traffic Studies Section at (626) 300-4740

4. Related Projects: Project Consultant shall consultant with Los Angeles County Department of Regional Planning and planning departments of adjoining Cities to identify planned development in the vicinity of the project site. **[Provided in Table 3]**

5. Congested Management Program (CMP): Project Consultant shall conduct CMP analysis in accordance with the County's Traffic Impact Analysis Report Guidelines.

6. Freeway Analysis: Project Consultant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002). If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using the County of Los Angeles' CMP Land Use Analysis Guidelines.

7. Site Access Analysis: Project's in rural areas shall conduct a site access analysis in accordance with the County's Access Management for Private Developments Guidelines Manual. All schools, waste/recycling collection or other projects as determined by TLD shall conduct a queuing analysis to ensure queues do not spill-over onto County roads. For schools, provide boundary map and information on neighboring schools including day care facilities. The traffic study will also document pick-up and drop-off procedures. **[Site Plan provided in Figure 4]**

8. Other Instructions:

Traffic counts may be conducted immediately per the following:
• Must be taken on Tuesdays, Wednesdays or Thursdays.
• Must exclude holidays, and the first weekdays before and after the holiday.
• Must be taken on days when local schools or colleges are in session.
• Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).
• Traffic counts used for other traffic studies in the area shall **NOT** be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.
• New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.

For all proposed mitigation measures to address project specific impacts, the project shall include conceptual plans for the improvements in the traffic study which shall be made part of the review and approval of the traffic study. All proposed improvements shall be within public the right-of-way.

For all proposed mitigation measures to address cumulative impacts, the project shall include conceptual plans and cost estimates for the improvements in the traffic study which shall be made part of the review and approval of the traffic study.
Unless otherwise approved by TLD, level-of-service analysis shall be performed based on the following scenarios: (a) Traffic conditions in the vicinity of the project as they exist at the time the notice of preparation (NOP) is published, or if no NOP is published, at the time environmental analysis is commenced; (b) Traffic in (a) plus project traffic; (c) Traffic in (b) with the proposed mitigation measures (if necessary); (d) Traffic in (b) plus the cumulative traffic that includes project and other known developments at the time the notice of preparation (NOP) is published, or if no NOP is published, at the time environmental analysis is commenced; and (e) Traffic in (d) with the proposed mitigation measures (if necessary).
Any required Traffic Index calculations shall be prepared in accordance with the latest version of the Caltrans Highway Design Manual
A Special Event Management Plan (SEMP) will be prepared for special events programed as part of the Project
The City of Carson applies intersection capacity utilization (ICU) methodology at signalized intersections while the City of Los Angeles required the critical movement analysis (CMA) worksheets for analysis of intersections. Signal warrant analyses are performed for analysis of unsignalized intersections in the City of Los Angeles and the County. In the City of Carson, if the worst approach is LOS E or F, then the significance of the Project impact is determined based on the ICU volume to capacity addition.

Contact Caltrans to determine if a freeway segment screening analysis is required.

TABLE 1
PROJECT TRIP GENERATION ESTIMATES

TRIP GENERATION RATES [a]													
Land Use	ITE Land Use	Rate	Weekday							Weekend			
			Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
				In	Out	Total	In	Out	Total		In	Out	Total
Golf Course [b]	430	per acre	3.74	74%	26%	0.19	34%	66%	0.28	5.82	52%	48%	0.64
General Office Building [c]	710	per ksf	9.74	86%	14%	1.16	16%	84%	1.15	2.21	54%	46%	0.53
Soccer Complex [d]	488	per field	71.33	61%	39%	0.99	66%	34%	16.43	430	59%	41%	54
Recreational Community Center [e]	495	per ksf	28.82	66%	34%	1.76	47%	53%	2.31	9.1	54%	46%	1.07
Tennis Courts [f]	490	per court	30.32	50%	50%	1.67	50%	50%	3.67	27.83	50%	50%	3
Skatepark	[g]	per ksf	9.1	53%	47%	0.3	50%	50%	1.36	16.61	53%	47%	1.86

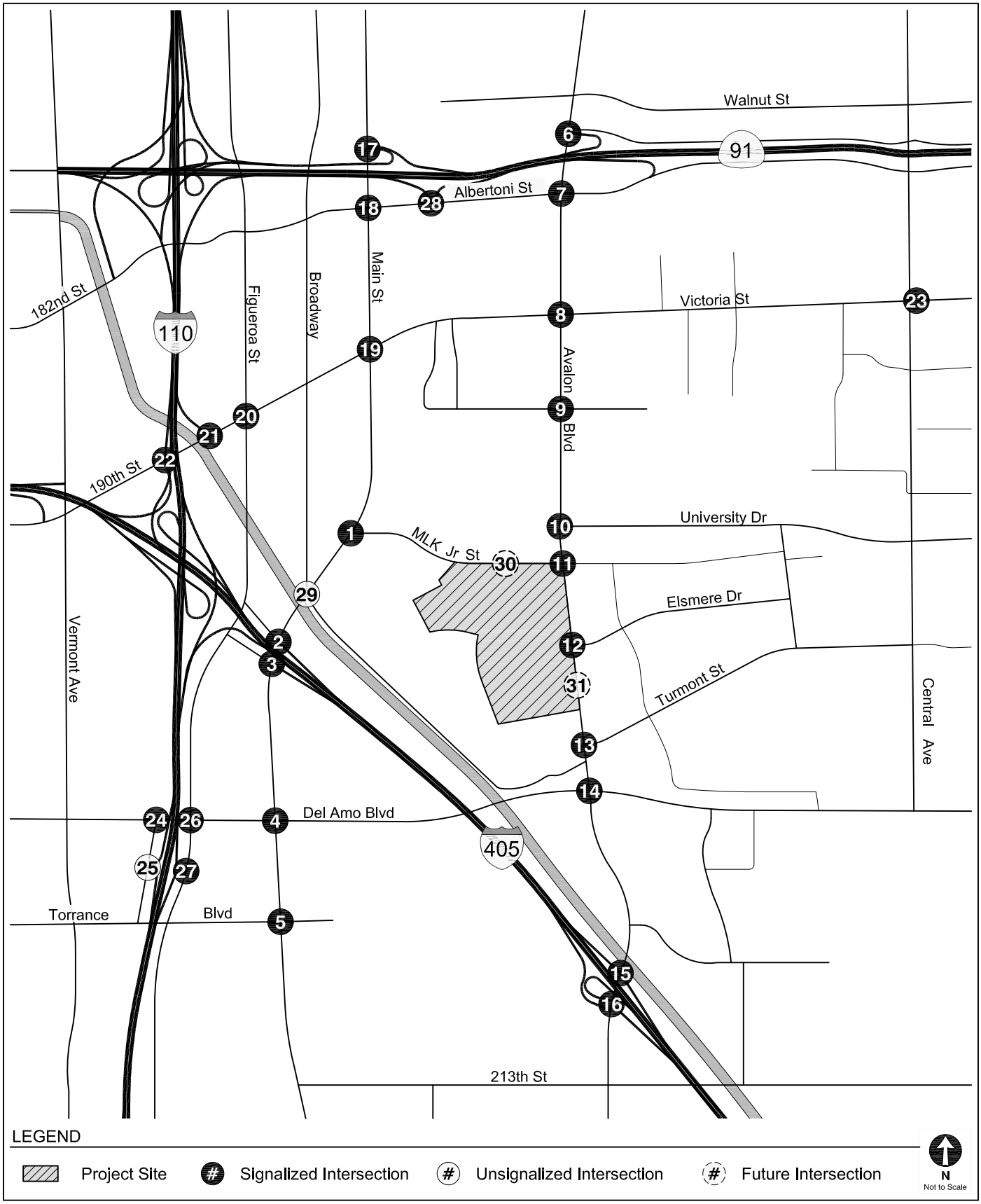
TRIP GENERATION ESTIMATES												
Land Use	Size	Weekday							Weekend			
		Daily	A.M. Peak Hour			P.M. Peak Hour			Daily	Complex Peak Hour		
			In	Out	Total	In	Out	Total		In	Out	Total
Existing Uses												
Victoria Golf Course	87 Acres	325	12	5	17	8	16	24	506	29	27	56
Subtotal - Existing Uses		***325***	***12***	***5***	***17***	***8***	***16***	***24***	***506***	***29***	***27***	***56***
Proposed Project												
Soccer Complex - ITE Rates / Emprirical	10 fields	713	6	4	10	108	56	164	4,300	319	221	540
Skatepark	43,560 sf	396	7	6	13	30	29	59	724	43	38	81
Tennis Complex [h]	62 courts	1,880	55	54	109	72	71	143	1,725	93	93	186
League Administration Building	5,000 sf	49	5	1	6	1	5	6	11	1	2	3
Learning Center/Development Facility	38,000 sf	1,095	44	23	67	41	47	88	346	22	19	41
Subtotal - Proposed Project		**4,133**	**117**	**88**	**205**	**252**	**208**	**460**	**7,106**	**478**	**373**	**851**
TOTAL NET NEW PROJECT TRIPS		**3,808**	**105**	**83**	**188**	**244**	**192**	**436**	**6,600**	**449**	**346**	**795**

Notes:
[a] Trip generation rates, unless otherwise noted, are from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017.
[b] Weekend trip generation rates for golf course use *Trip Generation, 9th Edition,* Institute of Transportation Engineers, 2012.
[c] League administration building trips based on ITE Land Use 710 (General Office Building).
[d] Weekday trip generation rates for Land Use 488: Soccer Complex from *Trip Generation, 10th Edition* , Institute of Transportation Engineers, 2017. Weekend trip generation rates based on emperical data taken at Placer Valley Sports Complex, 2015.
[e] To be conservative, the learning center and development facility trips were based on ITE Land Use 495 (Recreational Community Center). It is anticipated that this use would operate based on a fixed number of daily sessions with students primarily transported by bus, with no pick-up/drop-off occuring at the center.
[f] Trip generation Rates based on *Trip Generation, 9th Edition* , Institute of Transportation Engineers, 2012. Assumes Weekday AM and PM peak hours have 50% directional distribution.
[g] Trip generation rates from Center Avenue Skatepark found in the City of Huntington Beach Center Avenue Skatepark TIA, published December 2011. Weekend Daily trips were determined based on the ratio of weekday afternoon peak hour trips to weekday daily trips.
[h] Includes Exhabition Court, Spectator Venue, and Tennis Center Courts.

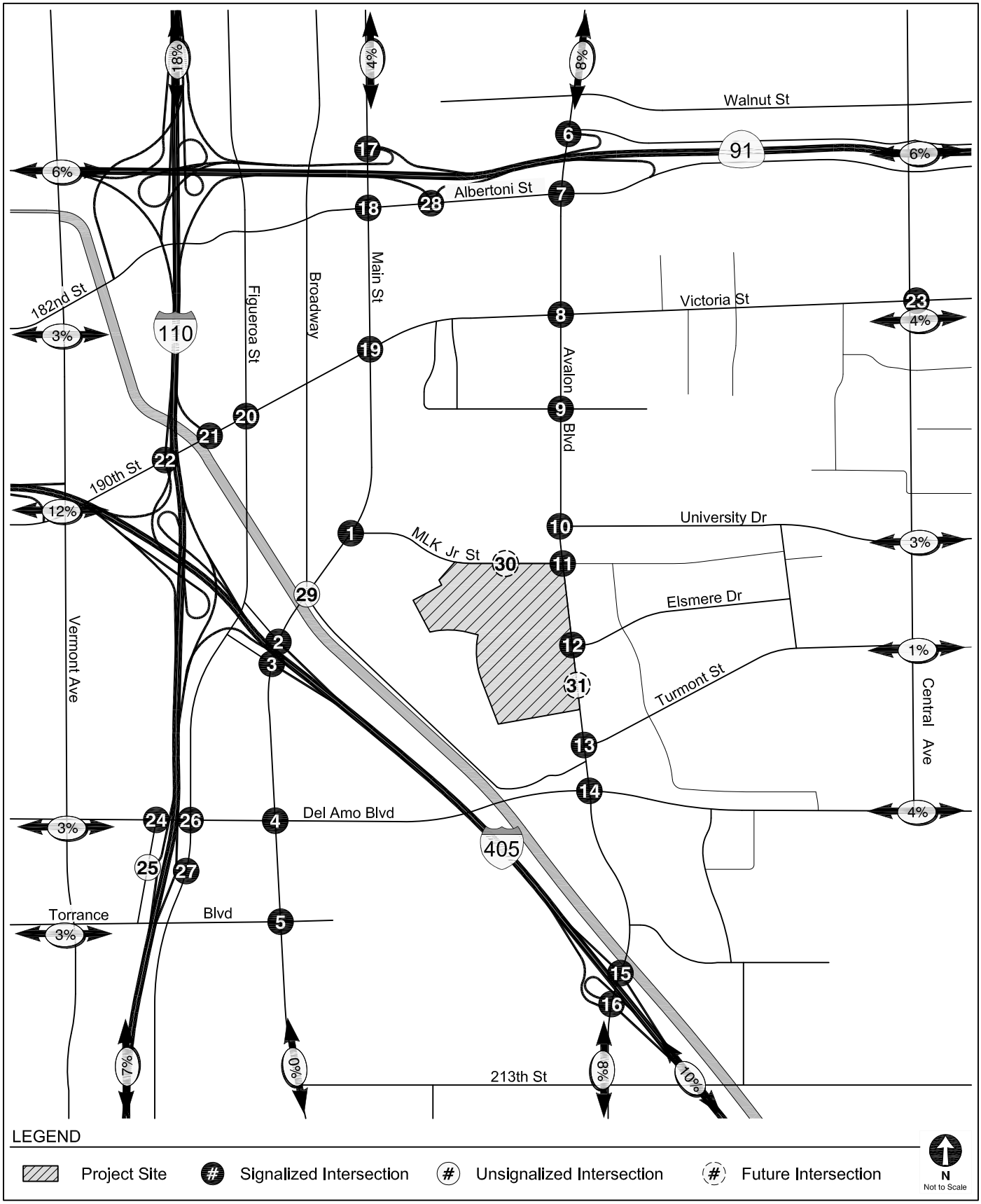
TABLE 2
STUDY INTERSECTIONS

No.	N/S Street	E/W Street	Jurisdiction
1.	Main Street	MLK Jr Street	City of Carson
2.	Main Street	I-405 NB Off-Ramp	City of Carson/Caltrans
3.	Main Street	I-405 SB On-Ramp	City of Carson/Caltrans
4.	Main Street	Del Amo Boulevard	City of Carson
5.	Main Street	Torrance Boulevard	City of Carson
6.	Avalon Boulevard	Artesia Bl/SR-91 WB On-Ramp	City of Carson/Caltrans
7.	Avalon Boulevard	Albertoni Street	City of Carson
8.	Avalon Boulevard	Victoria Street	City of Carson
9.	Avalon Boulevard	184th Street-StubHub Center Gate	City of Carson
10.	Avalon Boulevard	University Drive	City of Carson
11.	Avalon Boulevard	MLK Jr Street	City of Carson
12.	Avalon Boulevard	Elsmere Drive	City of Carson
13.	Avalon Boulevard	Turmont Street	City of Carson
14.	Avalon Boulevard	Del Amo Boulevard	City of Carson
15.	Avalon Boulevard	I-405 NB Ramps	City of Carson/Caltrans
16.	Avalon Boulevard	I-405 SB Ramps	City of Carson/Caltrans
17.	Main Street	SR-91 WB Ramps	City of Carson/Caltrans
18.	Main Street	Albertoni Street	City of Carson
19.	Main Street	Victoria Street	City of Carson
20.	Figueroa Street	Victoria Street	City of Carson/City of Los Angeles
21.	I-110 NB On-Ramp	190th Street	City of Los Angeles/Caltrans
22.	I-110 SB Off-Ramp	190st Street	City of Los Angeles/Caltrans
23.	Central Avenue	Victoria Street	City of Carson
24.	Hamilton Avenue	Del Amo Boulevard	County of Los Angeles
25 [a].	Hamilton Avenue	110 SB Ramps	County of Los Angeles/Caltrans
26.	Figueroa Street	Del Amo Boulevard	City of Carson
27.	Figueroa Street	110 NB Ramps	City of Carson/Caltrans
28.	SR-91 EB Ramps	Albertoni Street	City of Carson/Caltrans
29 [a].	Main Street	Broadway	City of Carson
30.	New Intersection	MLK Jr Street	City of Carson
31.	Avalon Boulevard	New Intersection	City of Carson

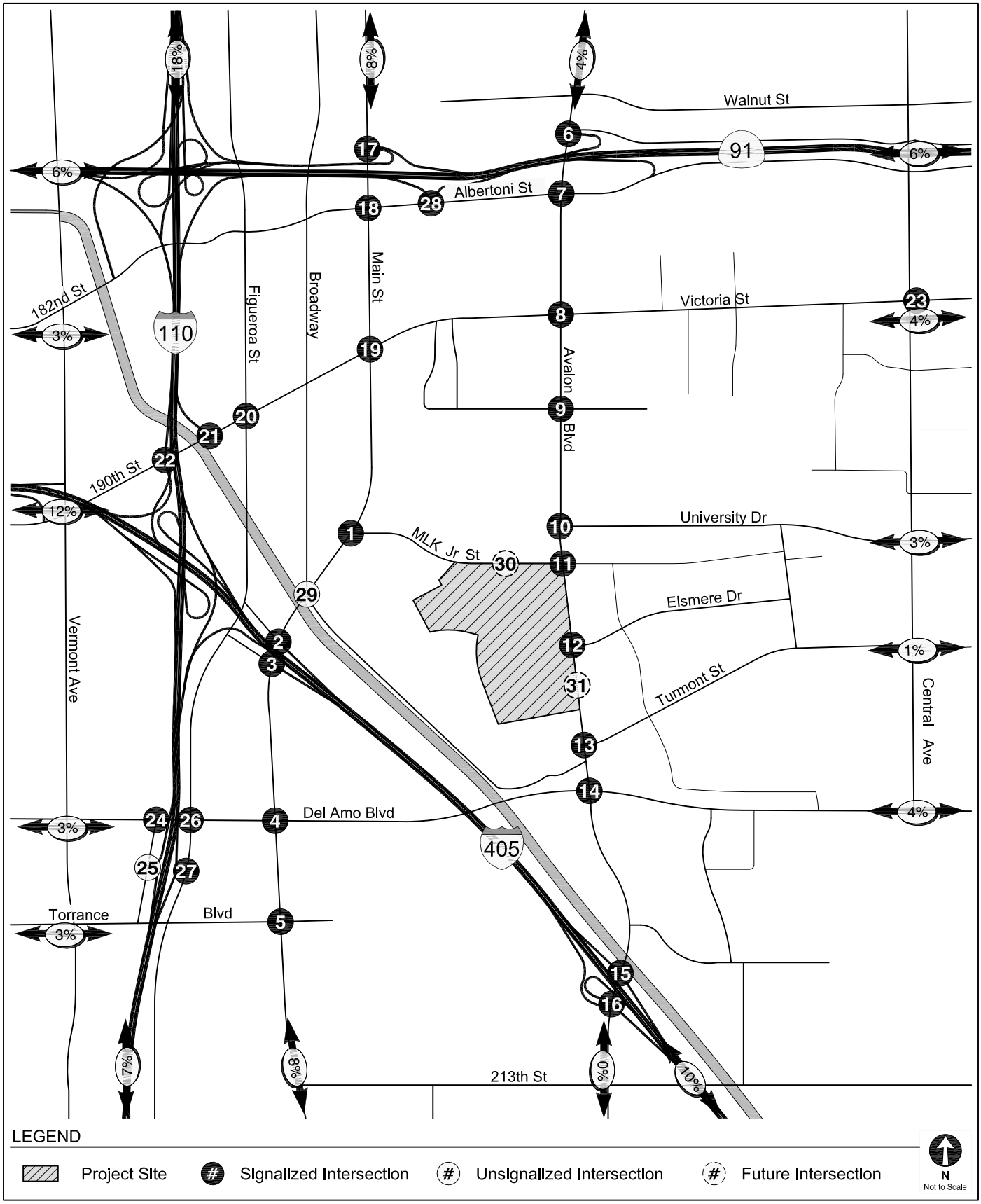
Notes:
[a] Unsignalized intersection



STUDY AREA	FIGURE 1

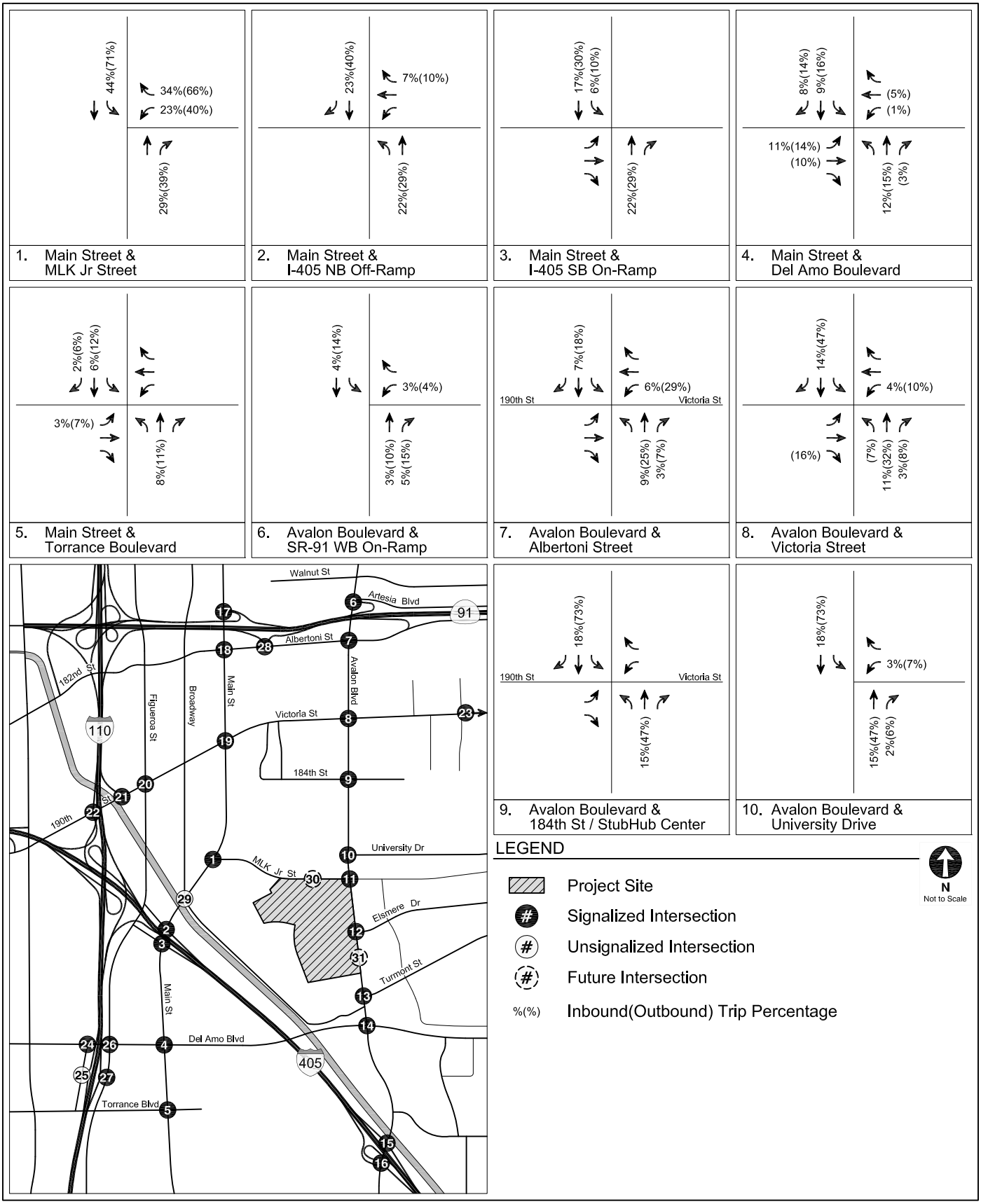


REGIONAL TRIP DISTRIBUTION WEEKDAY SOCCER	FIGURE 2A



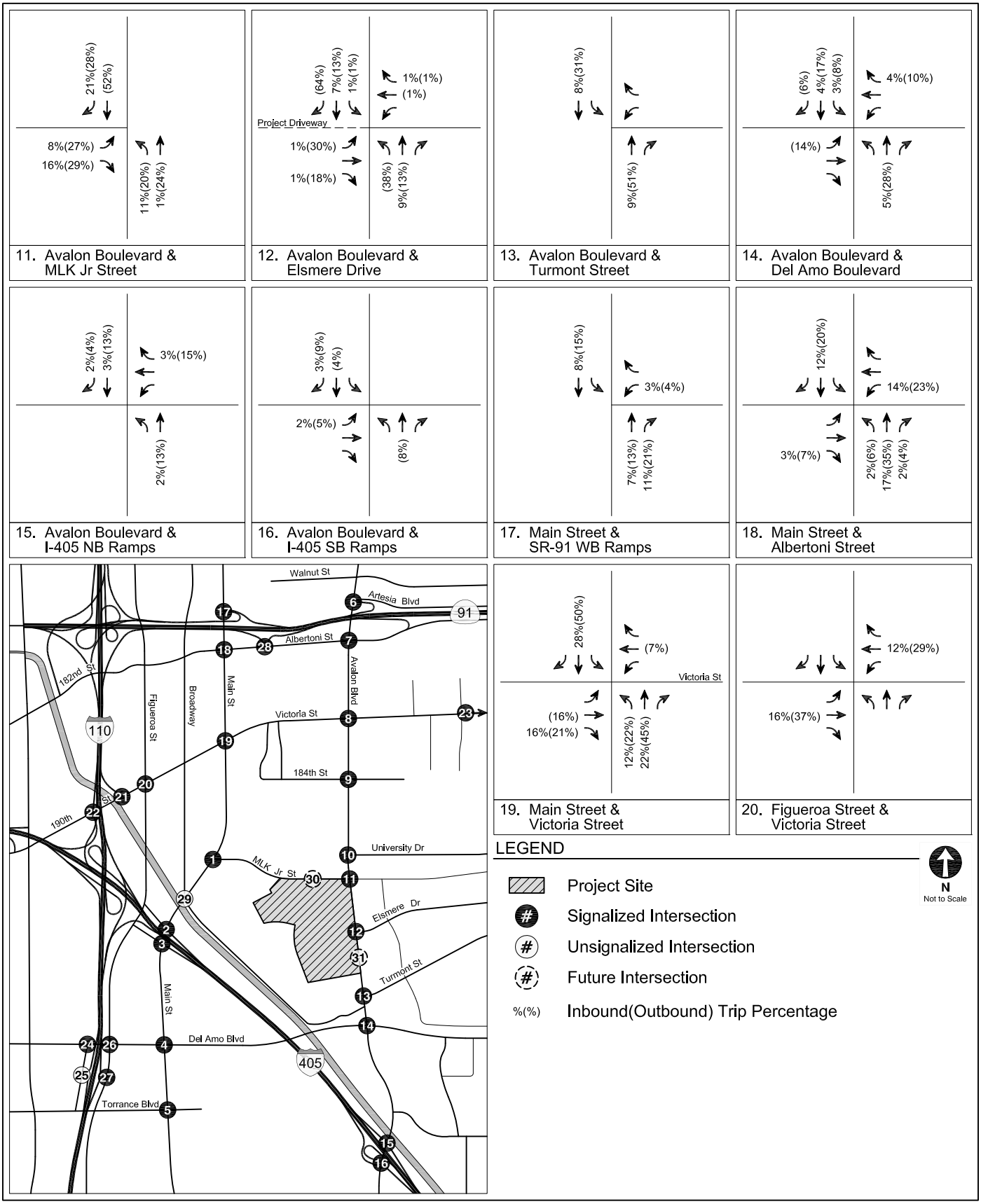
REGIONAL TRIP DISTRIBUTION
WEEKDAY TENNIS / CENTER

FIGURE
2B



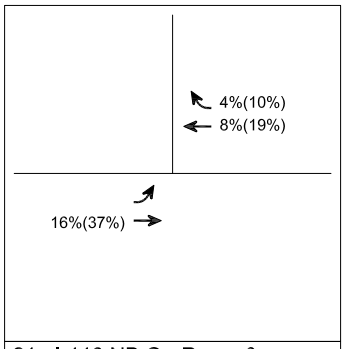
PROJECT TRIP DISTRIBUTION
WEEKDAY

FIGURE
3

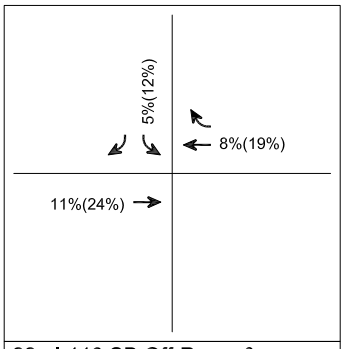


PROJECT TRIP DISTRIBUTION
WEEKDAY

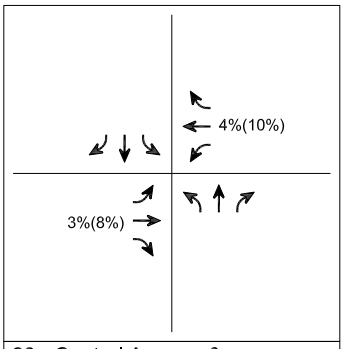
FIGURE
3 (CONT.)



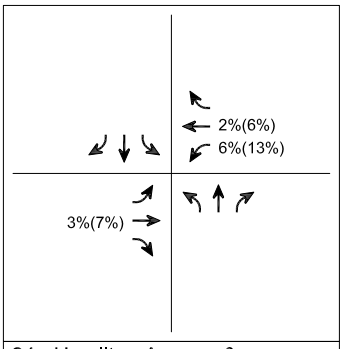
21. I-110 NB On-Ramp & 190th Street



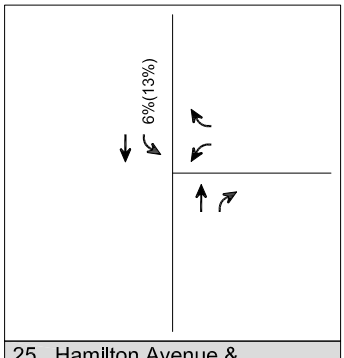
22. I-110 SB Off-Ramp & 190th Street



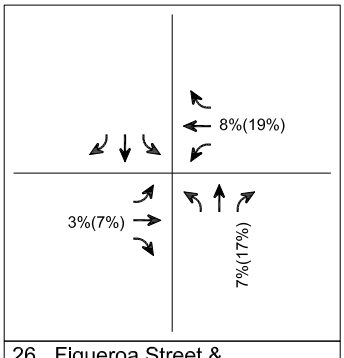
23. Central Avenue & Victoria Street



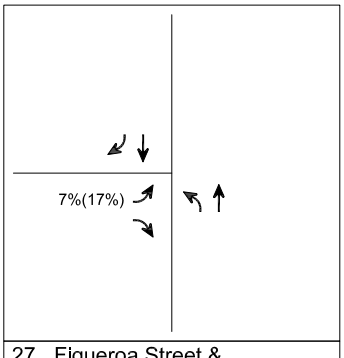
24. Hamilton Avenue & Del Amo Boulevard



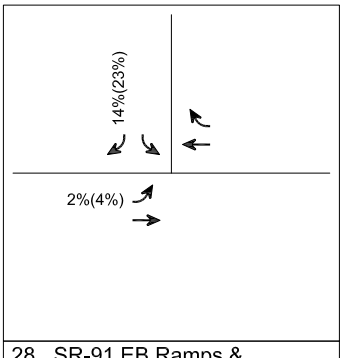
25. Hamilton Avenue & I-110 SB Ramps



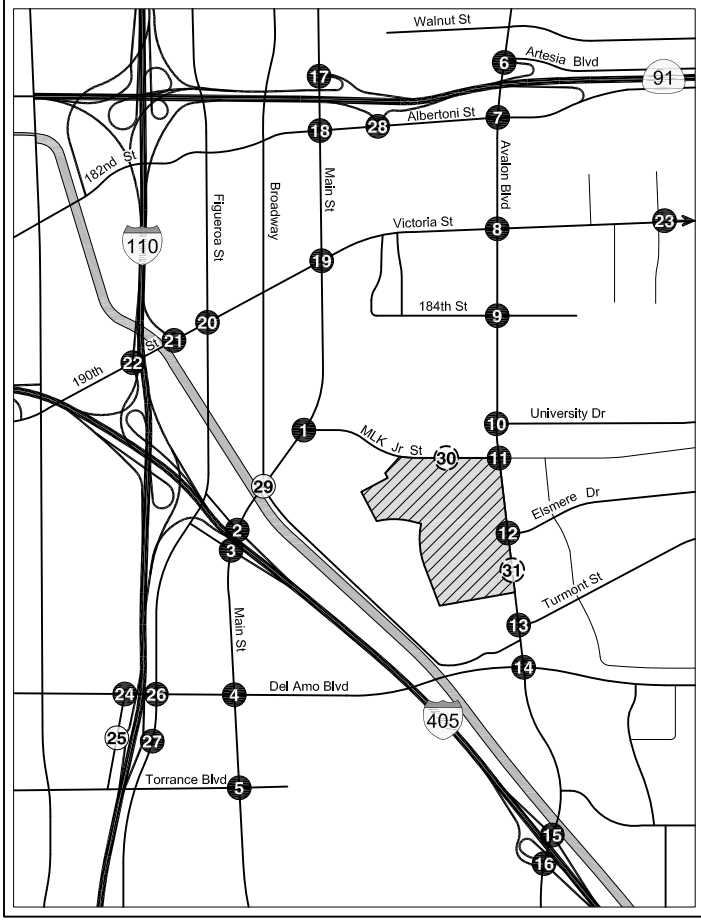
26. Figueroa Street & Del Amo Boulevard

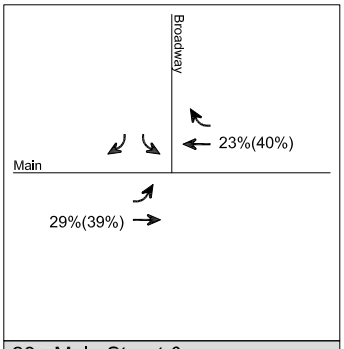


27. Figueroa Street & I-110 NB Ramps

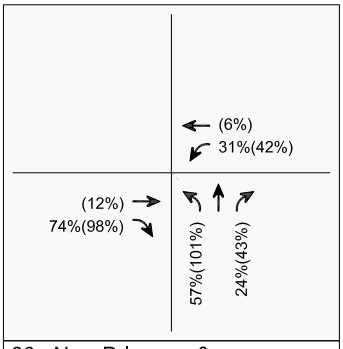


28. SR-91 EB Ramps & Albertoni Street





29. Main Street & Broadway

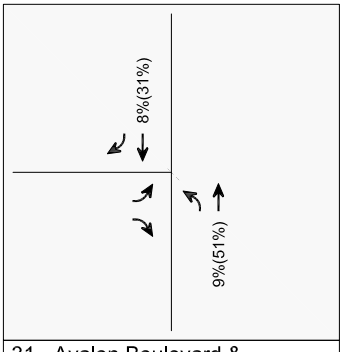


30. New Driveway & Martin Luther King Jr Street

N
Not to Scale

LEGEND

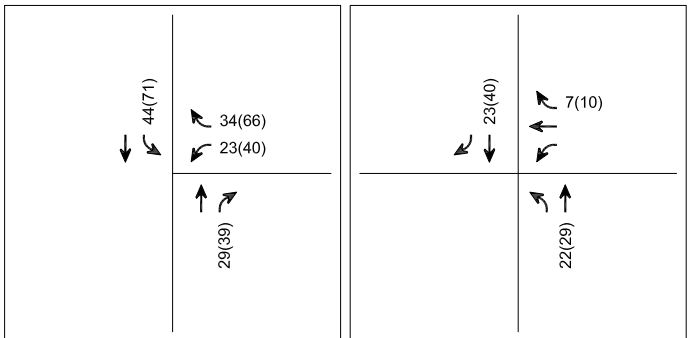
- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- %(%) Inbound(Outbound) Trip Percentage



31. Avalon Boulevard & New Driveway

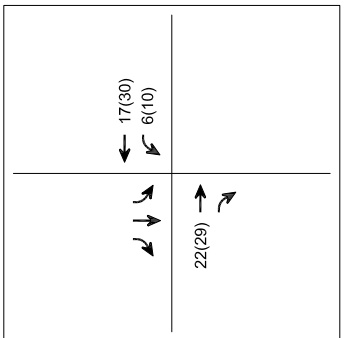
PROJECT TRIP DISTRIBUTION
WEEKDAY

FIGURE
3 (CONT.)

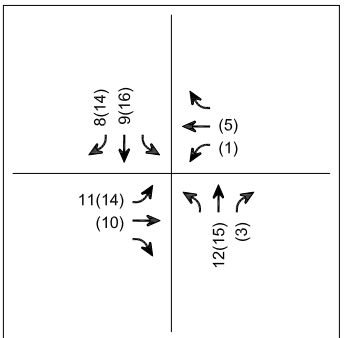


1. Main Street & MLK Jr Street

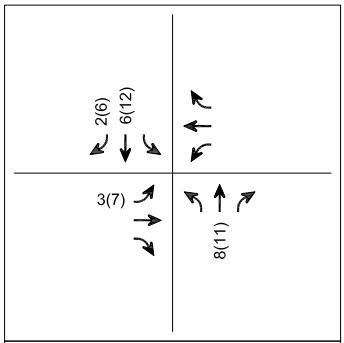
2. Main Street & I-405 NB Off-Ramp



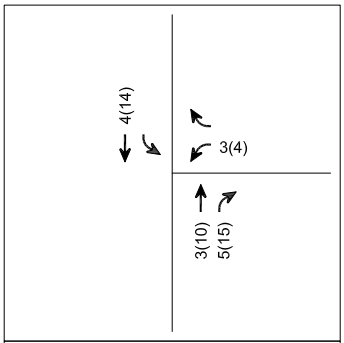
3. Main Street & I-405 SB On-Ramp



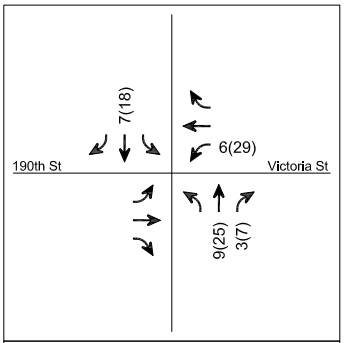
4. Main Street & Del Amo Boulevard



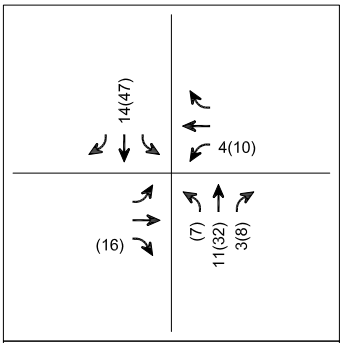
5. Main Street & Torrance Boulevard



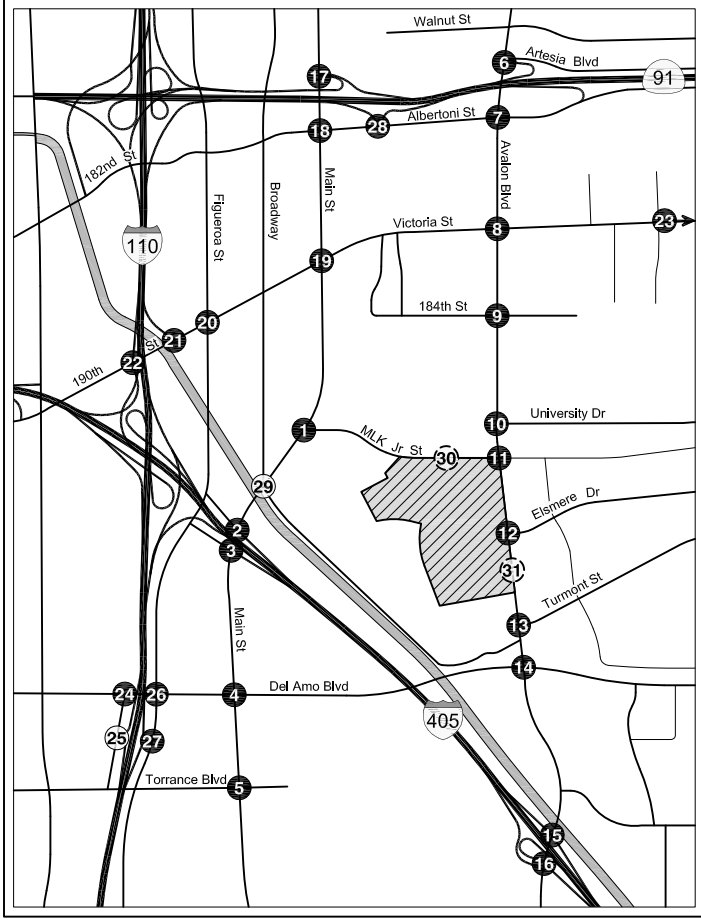
6. Avalon Boulevard & SR-91 WB On-Ramp

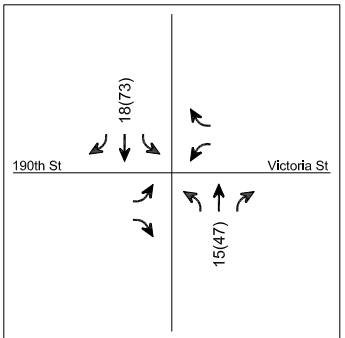


7. Avalon Boulevard & Albertoni Street

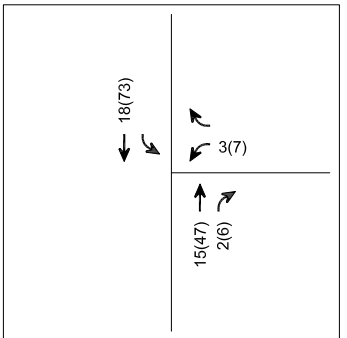


8. Avalon Boulevard & Victoria Street





9. Avalon Boulevard & 184th St / StubHub Center



10. Avalon Boulevard & University Drive

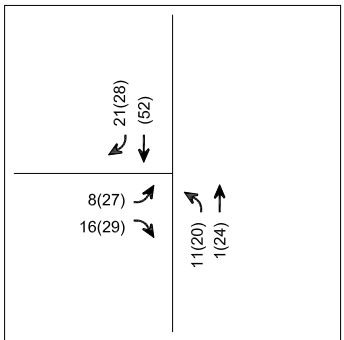
LEGEND

- Project Site
- # Signalized Intersection
- # Unsignalized Intersection
- # Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

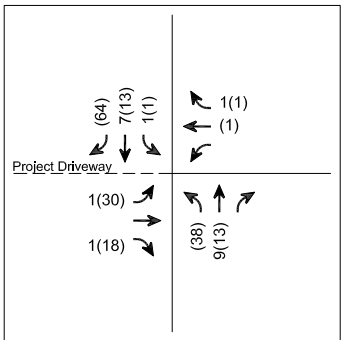
N
Not to Scale

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

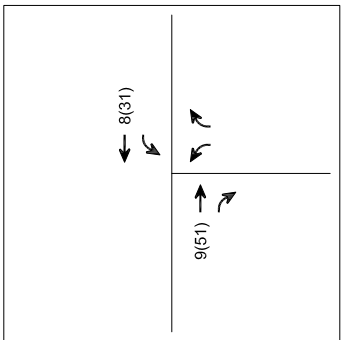
FIGURE
4



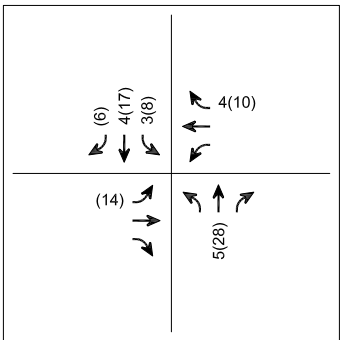
11. Avalon Boulevard & MLK Jr Street



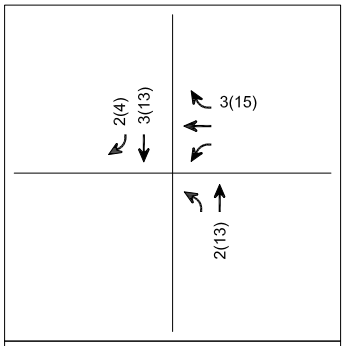
12. Avalon Boulevard & Elsmere Drive



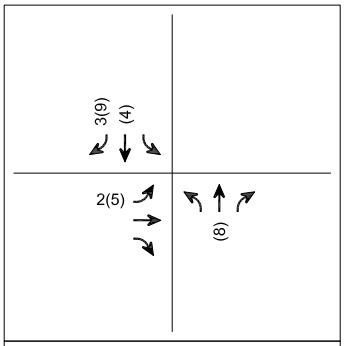
13. Avalon Boulevard & Turmont Street



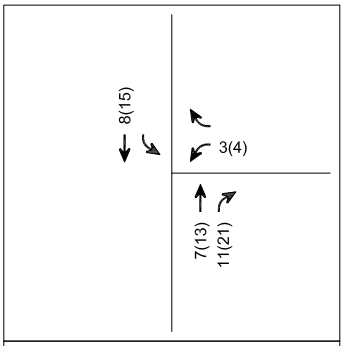
14. Avalon Boulevard & Del Amo Boulevard



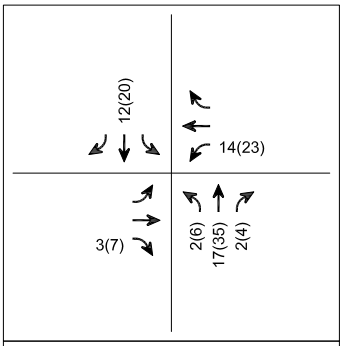
15. Avalon Boulevard & I-405 NB Ramps



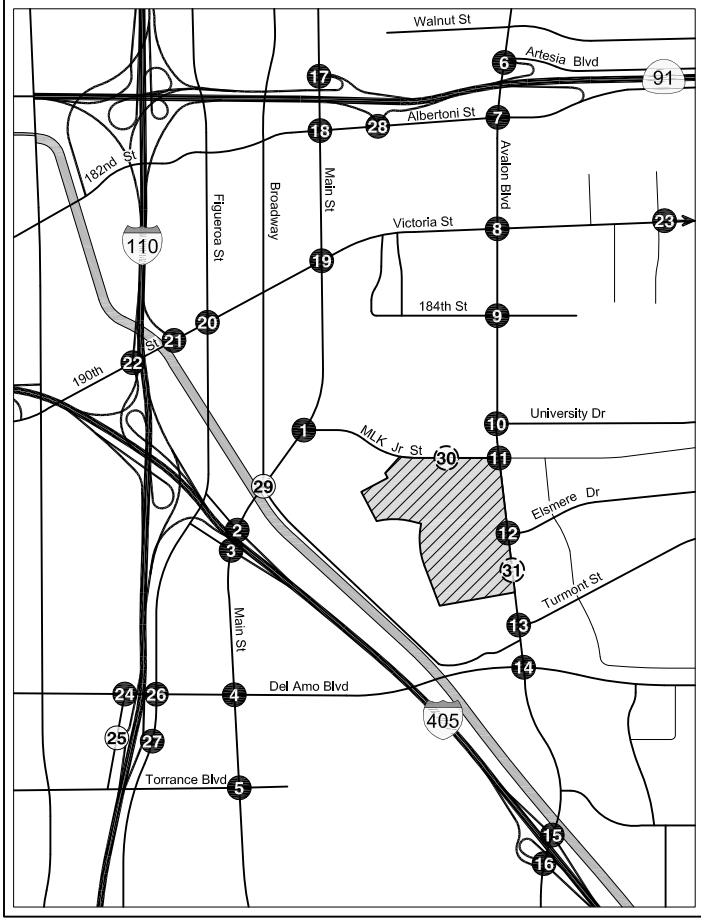
16. Avalon Boulevard & I-405 SB Ramps

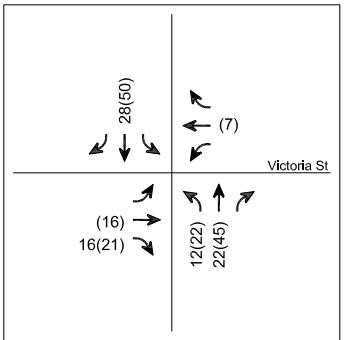


17. Main Street & SR-91 WB Ramps

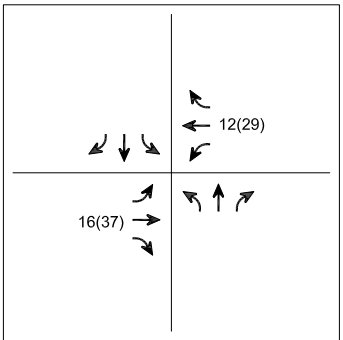


18. Main Street & Albertoni Street





19. Main Street & Victoria Street



20. Figueroa Street & Victoria Street

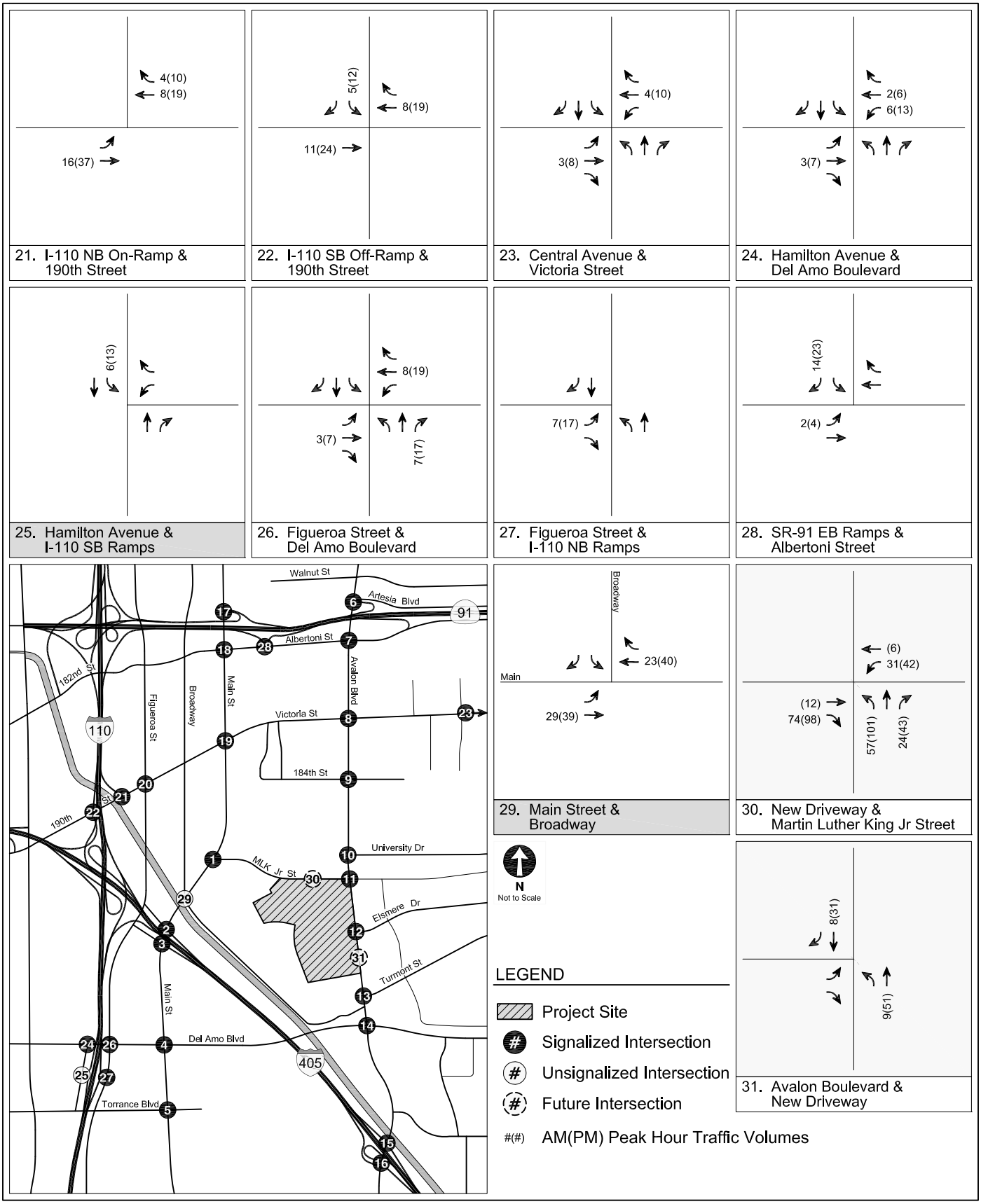
LEGEND

- Project Site
- Signalized Intersection
- Unsignalized Intersection
- Future Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
4 (CONT.)



PROJECT-ONLY
WEEKDAY PEAK HOUR TRAFFIC VOLUMES

FIGURE
4 (CONT.)



SOURCE: MEIS, November 2018.

CONCEPTUAL SITE PLAN

FIGURE 5

TABLE 3
RELATED PROJECT LIST

No.	Address / Project Name	Description	Weekday Trip Generation [a]						Weekend Trip Generation [a]		
			Daily	Morning Peak Hour			Afternoon Peak Hour			Saturday Peak Hour	
				In	Out	Total	In	Out	Total	In	Out	Total
1	21521 S Avalon Blvd Carson, CA	357 apartment units, 30,700 sf retail	3,685	54	156	210	199	13	336	197	191	388
2	1281 E University Dr Carson, CA	47,000 sf retail	2,007	27	16	43	84	91	175	110	102	212
3	21205 S Main St Carson, CA	46 apartment units	306	5	19	24	19	10	29	16	16	32
4	17706 S Main St Gardena, CA	94,731 sf warehouse, 15,000 sf office	503	43	9	52	11	41	53	7	6	13
5	19210 S Vermont Ave, Gardena, CA	61,500 sf office	677	84	11	95	16	76	92	18	15	33
6	1054 W 204th St Torrance, CA [b] [c]	8.5 acre park	425	3	3	6	2	2	4	1	1	2
7	Development District #3 (11 acres) Carson, CA [c	300 dwelling units	1,580	27	109	136	84	45	129	105	105	210
8	The District at South Bay Carson, CA [e][f]	581,000 sf shopping center	12,388	228	85	313	446	502	948	592	546	1,138
9	The Creek at Dominguez Hills Carson, CA	71,000 sf marketplace, 51,000 sf restaurant, indoor sports complex, 30,000 sf youth learning experience, 7,500 sf indoor skydiving, enhanced driving range experience and putting green, 40,000 sf clubhouse, 36,000 sf sports wellness facility, zipline course, 6.6 acre park	16,132	580	384	964	727	669	1,396	878	912	1,790
TOTAL PROJECTED RELATED PROJECT GROWTH			**37,703**	**1,051**	**792**	**1,843**	**1,588**	**1,449**	**3,162**	**1,924**	**1,894**	**3,818**

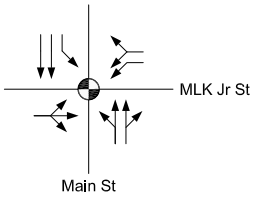
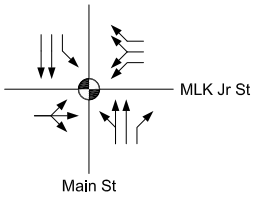
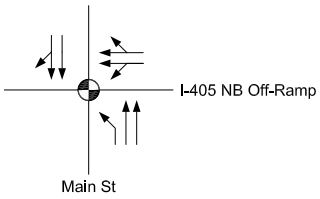
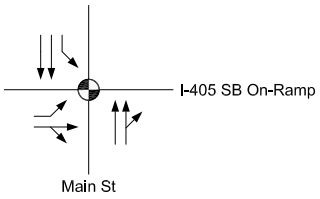
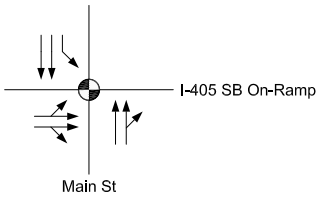
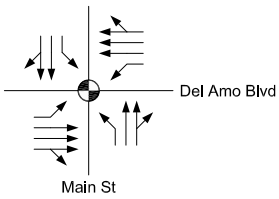
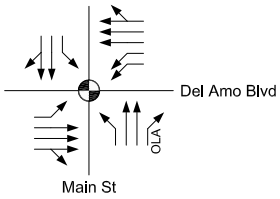
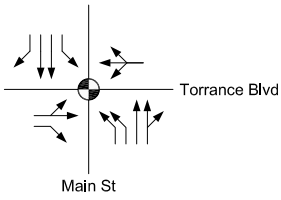
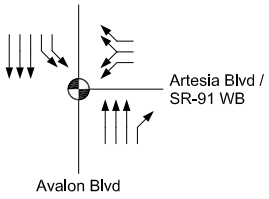
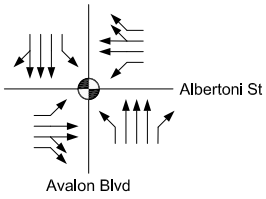
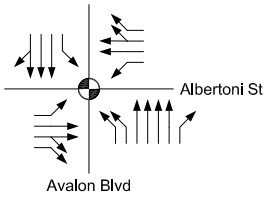
Notes:
[a] All Trip generation estimates based on The District at South Bay DEIR Fehr & Peers, 2017. All related projects fall within 1.5 miles of the Kimmelman Site.
[b] Trip generation estimates for parks based on information provided by the "Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region", April 2002
[c] Related projects provided by LA County on July 11th
[d] The 11 acre parcel north of Del Amo was previously included in the Carson Marketplace Project but was sold separately and is not longer part of modified project description for THE DISTRICT AT SOUTH BAY.
[e] Review of The District development phasing indicates that only the 581,000 sf shopping center portion is anticipated to be completed and operational by the Project opening year.
[f] Weekend volumes estimated by growing weekday afternoon peak hour volumes by a factor of 1.2 trips. This is based on the difference between weekday afternoon peak hour and Saturday peak hour of generator data for a shopping center (ITE 820) in Trip Generation ITE 10th edition, 2017.

Appendix B

Intersection Lane Configurations

LEGEND

Signalized Intersection

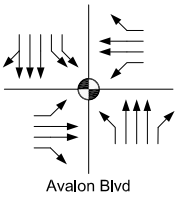
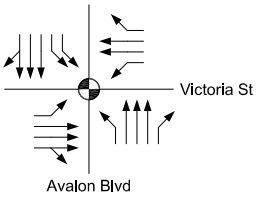
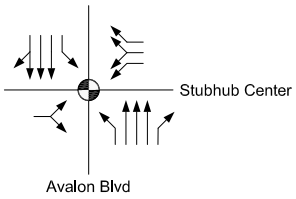
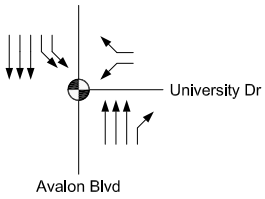
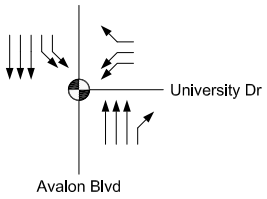
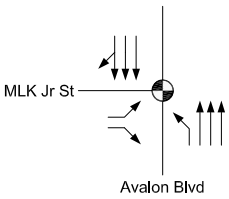
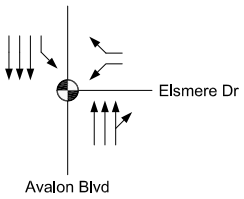
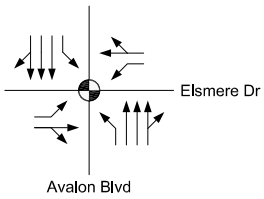
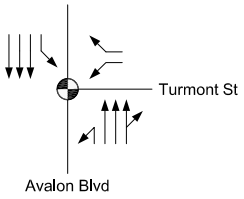
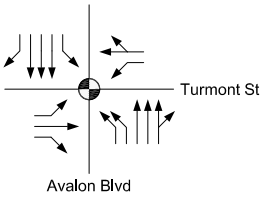
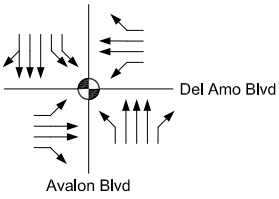
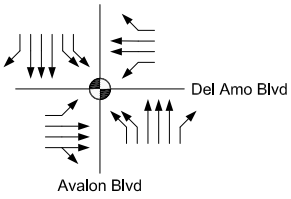
	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
1. Main Street & MLK Jr Street		Same as Existing Conditions	
2. Main Street & I-405 NB Off-Ramp		Same as Existing Conditions	Same as Existing Conditions
3. Main Street & I-405 SB On-Ramp		Same as Existing Conditions	
4. Main Street & Del Amo Boulevard		Same as Existing Conditions	
5. Main Street & Torrance Boulevard		Same as Existing Conditions	Same as Existing Conditions
6. Avalon Boulevard & Artesia Boulevard / SR-91 WB On-Ramp		Same as Existing Conditions	Same as Existing Conditions
7. Avalon Boulevard & Albertoni Street		Same as Existing Conditions	

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

LEGEND

Signalized Intersection

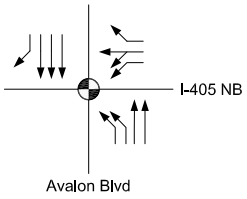
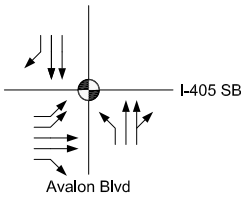
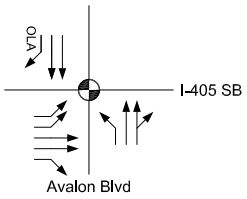
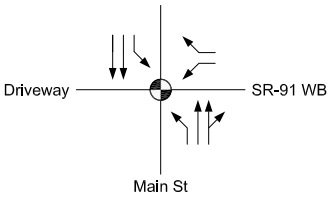
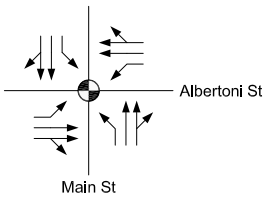
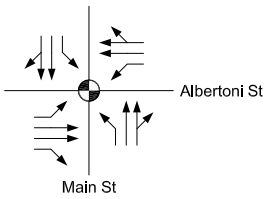
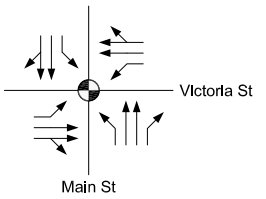
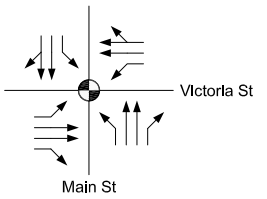
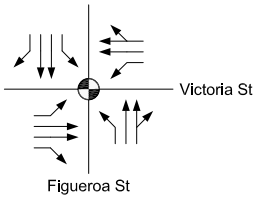
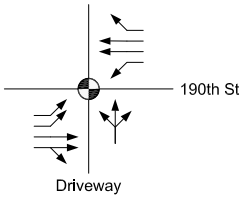
	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
8. Avalon Boulevard & Victoria Street		Same as Existing Conditions	
9. Avalon Boulevard & 184th Street / Stubhub Center Gate		Same as Existing Conditions	Same as Existing Conditions
10. Avalon Boulevard & University Drive		Same as Existing Conditions	
11. Avalon Boulevard & MLK Jr Street		Same as Existing Conditions	Same as Existing Conditions
12. Avalon Boulevard & Elsmere Drive			Same as Future with Project Conditions
13. Avalon Boulevard & Turmont Street			Same as Future with Project Conditions
14. Avalon Boulevard & Del Amo Boulevard		Same as Existing Conditions	

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

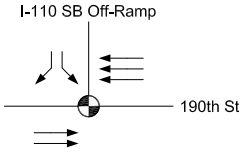
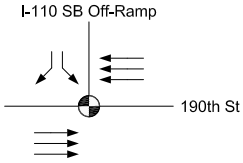
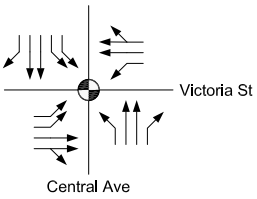
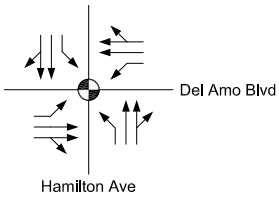
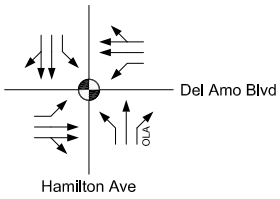
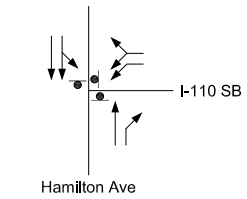
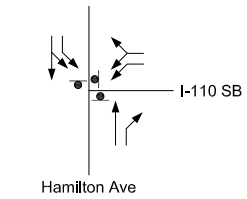
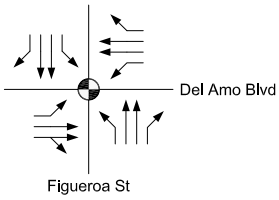
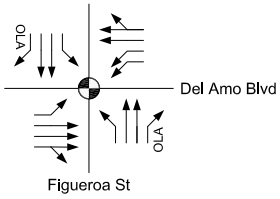
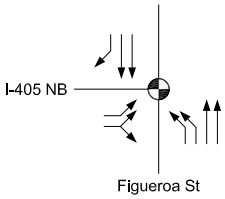
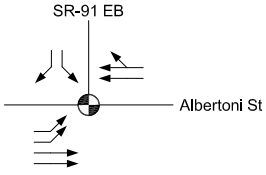
LEGEND

Signalized Intersection

	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
15. Avalon Boulevard & I-405 NB Ramps		Same as Existing Conditions	Same as Existing Conditions
16. Avalon Boulevard & I-405 SB Ramps		Same as Existing Conditions	
17. Main Street & SR-91 WB Ramps		Same as Existing Conditions	Same as Existing Conditions
18. Main Street & Albertoni Street		Same as Existing Conditions	
19. Main Street & Victoria Street		Same as Existing Conditions	
20. Figueroa Street & Victoria Street		Same as Existing Conditions	Same as Existing Conditions
21. I-110 NB On-Ramp & 190th Street		Same as Existing Conditions	Same as Existing Conditions

LEGEND

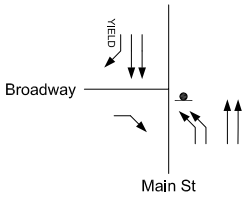
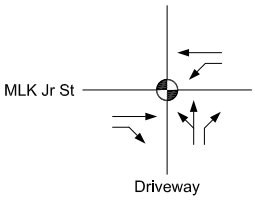
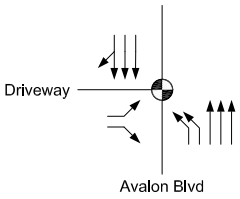
- Signalized Intersection
- Stop Sign

	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
22. I-110 SB Off-Ramp & 190th Street		Same as Existing Conditions	
23. Central Avenue & Victoria Street		Same as Existing Conditions	Same as Existing Conditions
24. Hamilton Avenue & Del Amo Boulevard		Same as Existing Conditions	
25. Hamilton Avenue & I-110 SB Ramps		Same as Existing Conditions	
26. Figueroa Street & Del Amo Boulevard		Same as Existing Conditions	
27. Figueroa Street & I-110 NB Ramps		Same as Existing Conditions	Same as Existing Conditions
28. SR-91 EB Ramps & Albertoni Street		Same as Existing Conditions	Same as Existing Conditions

LEGEND

Signalized Intersection

Stop Sign

	EXISTING CONDITIONS (YEAR 2018)	FUTURE WITH PROJECT CONDITIONS (YEAR 2020)	FUTURE WITH PROJECT WITH MITIGATION CONDITIONS (YEAR 2020)
29. Main Street & Broadway		Same as Existing Conditions	Same as Existing Conditions
30. New Driveway & MLK Jr Street	New Intersection		Same as Future with Project Conditions
31. Avalon Boulevard & New Driveway	New Intersection		Same as Future with Project Conditions

Appendix C

Turning Movement Counts

National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & 192nd St
City: Carson
Control: Signalized

Project ID: 18-05081-001
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				192nd St				192nd St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	1	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	73	8	0	8	94	0	0	0	0	0	0	27	0	20	0	230
7:15 AM	1	72	20	0	13	155	0	0	0	0	1	0	40	0	26	0	328
7:30 AM	1	123	25	0	8	175	0	0	0	0	0	0	41	0	29	0	402
7:45 AM	1	119	37	0	33	115	0	0	0	0	0	0	43	0	31	0	379
8:00 AM	1	141	54	0	14	95	0	0	1	0	2	0	35	0	33	0	376
8:15 AM	0	115	26	0	16	81	1	0	0	0	1	0	25	0	30	0	295
8:30 AM	0	81	43	0	11	91	1	0	0	0	0	0	20	0	20	0	267
8:45 AM	2	81	24	0	8	92	0	0	0	0	0	0	15	0	21	0	243
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	805	237	0	111	898	2	0	1	0	4	0	246	0	210	0	2520
APPROACH %'s :	0.57%	76.81%	22.61%	0.00%	10.98%	88.82%	0.20%	0.00%	20.00%	0.00%	80.00%	0.00%	53.95%	0.00%	46.05%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	4	455	136	0	68	540	0	0	1	0	3	0	159	0	119	0	1485
PEAK HR FACTOR :	1.000	0.807	0.630	0.000	0.515	0.771	0.000	0.000	0.250	0.000	0.375	0.000	0.924	0.000	0.902	0.000	0.924
	0.759				0.831				0.333				0.939				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	2	0	0	0	1	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	106	43	0	27	138	0	0	0	0	1	0	23	0	20	0	358
4:15 PM	0	128	43	0	52	148	1	0	0	0	1	0	22	0	21	0	416
4:30 PM	0	125	43	0	58	151	0	0	0	0	0	0	28	0	20	0	425
4:45 PM	1	146	50	0	46	125	0	0	0	0	0	0	22	0	17	0	407
5:00 PM	2	132	66	0	50	181	0	0	0	0	0	0	25	0	25	0	481
5:15 PM	0	134	52	0	60	149	0	0	0	0	1	0	24	0	20	0	440
5:30 PM	0	116	61	0	47	191	0	0	0	0	2	0	26	0	18	0	461
5:45 PM	0	136	57	0	58	137	0	0	0	0	0	0	20	0	14	0	422
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	1023	415	0	398	1220	1	0	0	0	5	0	190	0	155	0	3410
APPROACH %'s :	0.21%	70.99%	28.80%	0.00%	24.58%	75.36%	0.06%	0.00%	0.00%	0.00%	100.00%	0.00%	55.07%	0.00%	44.93%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	518	236	0	215	658	0	0	0	0	3	0	95	0	77	0	1804
PEAK HR FACTOR :	0.250	0.952	0.894	0.000	0.896	0.861	0.000	0.000	0.000	0.000	0.375	0.000	0.913	0.000	0.770	0.000	0.938
	0.945				0.917				0.375				0.860				

Prepared by National Data & Surveying Services

Main St & 192nd St

Peak Hour Turning Movement Count

ID: 18-05081-001
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	0	540	68	0	575	AM
NOON	0	0	0	0	0	NOON
PM	0	658	215	0	595	PM

0 2 1 0

EASTBOUND — 192nd St

AM	NOON	PM	
4	0	2	
0	0	0	0
1	0	0	0
0	0	0	1
3	0	3	0
AM	NOON	PM	

WESTBOUND — 192nd St

	PM	NOON	AM
1	77	0	119
0	0	0	0
2	95	0	159
0	0	0	0
	451	0	204
	PM	NOON	AM

CONTROL

Signalized

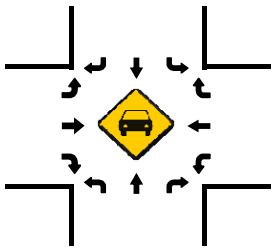
	AM	NOON	PM
TEV	1485	0	1804
PHF	0.92		0.94

0 0 2 0

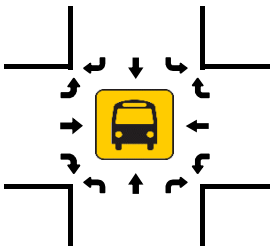
NORTHBOUND — Main St

PM	756	0	2	518	236	PM
NOON	0	0	0	0	0	NOON
AM	702	0	4	455	136	AM

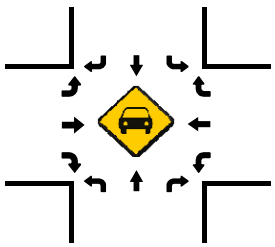
Total Vehicles (AM)



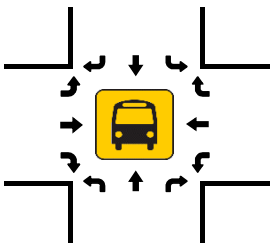
Total Vehicles (AM)



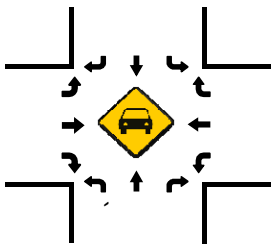
Total Vehicles (NOON)



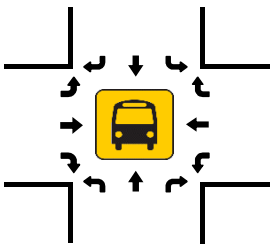
Total Vehicles (NOON)



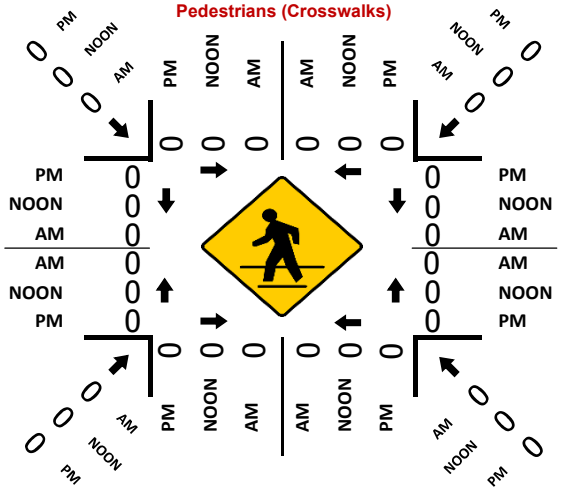
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & I-405 NB Off Ramp
City: Carson
Control: Signalized

Project ID: 18-05081-002
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				I-405 NB Off Ramp				I-405 NB Off Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1.5	0.5	0	0	0	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	81	0	0	0	135	17	0	0	0	0	0	14	71	44	0	362
7:15 AM	7	90	0	0	0	189	22	0	0	0	0	0	13	81	37	0	439
7:30 AM	8	143	0	0	0	240	23	0	0	0	0	0	17	78	56	0	565
7:45 AM	5	174	0	0	0	208	19	0	0	0	0	0	32	82	67	0	587
8:00 AM	6	189	0	0	0	142	16	0	0	0	0	0	21	88	56	0	518
8:15 AM	9	151	0	0	0	134	12	0	0	0	0	0	17	76	53	0	452
8:30 AM	6	129	0	0	0	125	13	0	0	0	0	0	23	69	55	0	420
8:45 AM	2	118	0	0	0	128	13	0	0	0	0	0	16	83	52	0	412
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	43	1075	0	0	0	1301	135	0	0	0	0	0	153	628	420	0	3755
APPROACH %'s :	3.85%	96.15%	0.00%	0.00%	0.00%	90.60%	9.40%	0.00%					12.74%	52.29%	34.97%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	28	657	0	0	0	724	70	0	0	0	0	0	87	324	232	0	2122
PEAK HR FACTOR :	0.778	0.869	0.000	0.000	0.000	0.754	0.761	0.000	0.000	0.000	0.000	0.000	0.680	0.920	0.866	0.000	0.904
	0.878				0.755								0.888				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1.5	0.5	0	0	0	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	4	149	0	0	0	247	16	0	0	0	0	0	13	33	53	0	515
4:15 PM	4	173	0	0	0	302	13	0	0	0	0	0	22	29	46	0	589
4:30 PM	7	145	0	0	0	283	23	0	0	0	0	0	14	26	50	0	548
4:45 PM	3	180	0	0	0	252	17	0	0	0	0	0	22	26	69	0	569
5:00 PM	5	181	0	0	0	333	20	0	0	0	0	0	12	31	53	0	635
5:15 PM	3	175	0	0	0	322	12	0	0	0	0	0	9	31	61	0	613
5:30 PM	7	160	0	0	0	300	34	0	0	0	0	0	26	32	62	0	621
5:45 PM	6	158	0	0	0	280	26	0	0	0	0	0	14	27	60	0	571
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	39	1321	0	0	0	2319	161	0	0	0	0	0	132	235	454	0	4661
APPROACH %'s :	2.87%	97.13%	0.00%	0.00%	0.00%	93.51%	6.49%	0.00%					16.08%	28.62%	55.30%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	21	674	0	0	0	1235	92	0	0	0	0	0	61	121	236	0	2440
PEAK HR FACTOR :	0.750	0.931	0.000	0.000	0.000	0.927	0.676	0.000	0.000	0.000	0.000	0.000	0.587	0.945	0.952	0.000	0.961
	0.934				0.940								0.871				

Prepared by National Data & Surveying Services

Main St & I-405 NB Off Ramp

Peak Hour Turning Movement Count

ID: 18-05081-002
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	70	724	0	0	889	AM
NOON	0	0	0	0	0	NOON
PM	92	1235	0	0	910	PM

I-405 NB Off Ramp — EASTBOUND

AM	NOON	PM		
422	0	234	⇦	
0	0	0	↶	0
0	0	0	↱	0
0	0	0	→	0
0	0	0	↷	0
AM	NOON	PM		

I-405 NB Off Ramp — WESTBOUND

PM	NOON	AM		
236	0	232	↰	0
121	0	324	←	2
61	0	87	↰	0
0	0	0	↰	0
0	0	0	⇨	
PM	NOON	AM		

Main St — NORTHBOUND

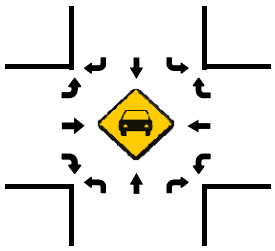
PM	1296	0	21	674	0	PM
NOON	0	0	0	0	0	NOON
AM	811	0	28	657	0	AM

⇩	↶	↰	↑	↱
	0	1	2	0

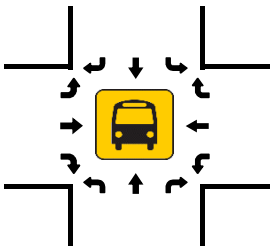
CONTROL			
Signalized			
TEV	2122	0	2440
	AM	NOON	PM
PHF	0.90		0.96

	0.5	1.5	0	0

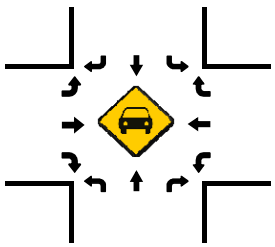
Total Vehicles (AM)



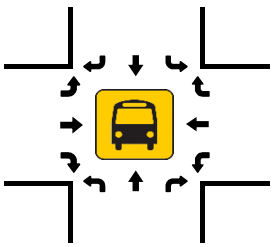
Total Vehicles (AM)



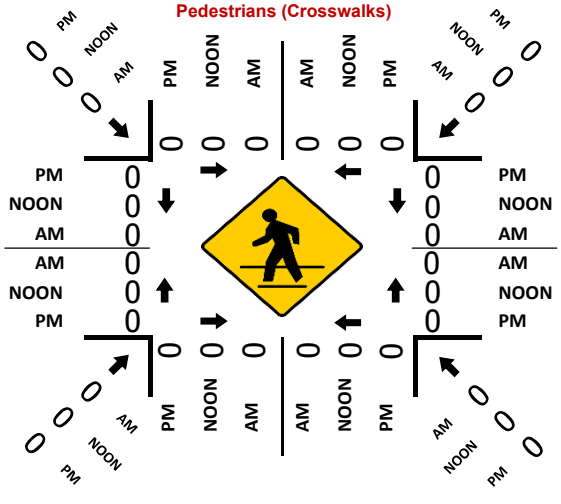
Total Vehicles (NOON)



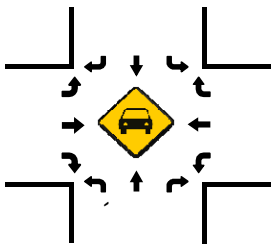
Total Vehicles (NOON)



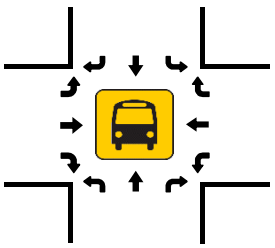
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & I-405 SB On Ramp
City: Carson
Control: Signalized

Project ID: 18-05081-003
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				I-405 SB On Ramp				I-405 SB On Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1.5	0.5	0	1	2	0	0	1	0.5	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	77	16	0	27	127	0	0	3	20	2	0	0	0	0	0	272
7:15 AM	0	100	11	0	37	166	0	0	9	19	3	0	0	0	0	0	345
7:30 AM	0	134	11	0	45	206	0	0	7	19	10	0	0	0	0	0	432
7:45 AM	0	175	16	0	29	216	0	0	5	18	4	0	0	0	0	0	463
8:00 AM	0	190	14	0	34	135	0	1	8	15	4	0	0	0	0	0	401
8:15 AM	0	149	10	0	24	119	0	0	9	19	5	0	0	0	0	0	335
8:30 AM	0	125	11	0	29	128	0	0	9	16	3	0	0	0	0	0	321
8:45 AM	0	113	16	0	30	111	0	1	6	21	3	0	0	0	0	0	301
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1063	105	0	255	1208	0	2	56	147	34	0	0	0	0	0	2870
APPROACH %'s :	0.00%	91.01%	8.99%	0.00%	17.41%	82.46%	0.00%	0.14%	23.63%	62.03%	14.35%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	599	52	0	145	723	0	1	29	71	21	0	0	0	0	0	1641
PEAK HR FACTOR :	0.000	0.788	0.813	0.000	0.806	0.837	0.000	0.250	0.806	0.934	0.525	0.000	0.000	0.000	0.000	0.000	0.886
		0.798				0.866				0.840							

NS/EW Streets:	Main St				Main St				I-405 SB On Ramp				I-405 SB On Ramp				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1.5	0.5	0	1	2	0	0	1	0.5	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	138	26	0	53	195	0	1	16	56	7	0	0	0	0	0	492
4:15 PM	0	148	24	0	64	267	0	1	23	65	11	0	0	0	0	0	603
4:30 PM	0	145	26	0	58	231	0	3	10	93	5	0	0	0	0	0	571
4:45 PM	0	162	19	0	66	205	0	2	18	62	13	0	0	0	0	0	547
5:00 PM	0	168	30	0	68	276	0	0	17	68	11	0	0	0	0	0	638
5:15 PM	0	161	29	0	72	251	0	1	16	77	9	0	0	0	0	0	616
5:30 PM	0	156	27	0	62	274	0	0	16	69	16	0	0	0	0	0	620
5:45 PM	0	154	23	0	69	224	0	0	12	62	6	0	0	0	0	0	550
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1232	204	0	512	1923	0	8	128	552	78	0	0	0	0	0	4637
APPROACH %'s :	0.00%	85.79%	14.21%	0.00%	20.96%	78.71%	0.00%	0.33%	16.89%	72.82%	10.29%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	639	109	0	271	1025	0	1	61	276	42	0	0	0	0	0	2424
PEAK HR FACTOR :	0.000	0.951	0.908	0.000	0.941	0.928	0.000	0.250	0.897	0.896	0.656	0.000	0.000	0.000	0.000	0.000	0.950
		0.944				0.943				0.929							

Prepared by National Data & Surveying Services

Main St & I-405 SB On Ramp

Peak Hour Turning Movement Count

ID: 18-05081-003
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	0	723	145	1	629	AM
NOON	0	0	0	0	0	NOON
PM	0	1025	271	1	701	PM

I-405 SB On Ramp — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
29	0	61	1
71	0	276	0.5
21	0	42	0.5
AM	NOON	PM	

I-405 SB On Ramp — WESTBOUND

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
656	0	268	
PM	NOON	AM	

CONTROL

Signalized

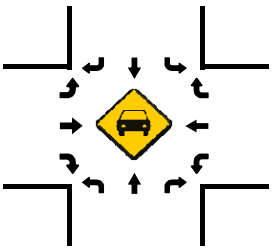
TEV	1641 AM	0 NOON	2424 PM
PHF	0.89		0.95

Main St — NORTHBOUND

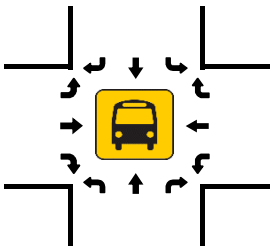
PM	1067	0	0	639	109	PM
NOON	0	0	0	0	0	NOON
AM	744	0	0	599	52	AM

0 2 1 0 — 0 0 1.5 0.5

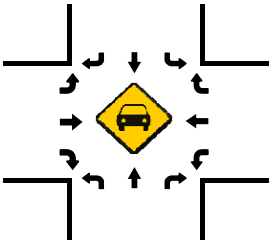
Total Vehicles (AM)



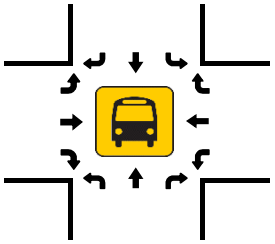
Total Vehicles (AM)



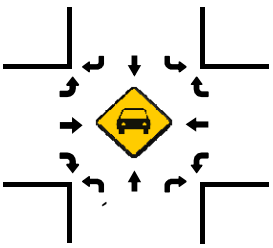
Total Vehicles (NOON)



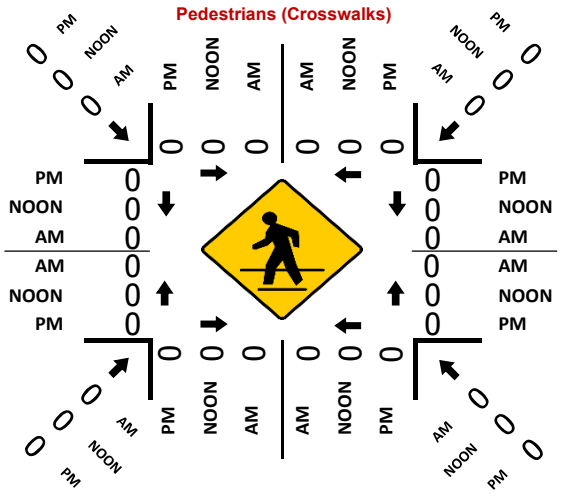
Total Vehicles (NOON)



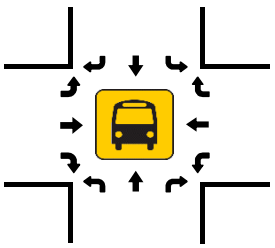
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & Del Amo Blvd
City: Carson
Control: Signalized

Project ID: 18-05081-004
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	13	59	38	0	3	64	42	0	22	79	6	0	35	243	10	0	614
7:15 AM	17	83	43	0	7	104	30	0	19	89	8	0	55	277	11	0	743
7:30 AM	15	118	58	0	9	170	47	0	25	107	6	0	62	266	12	1	896
7:45 AM	15	136	82	0	11	158	46	0	32	164	14	0	70	214	17	0	959
8:00 AM	17	169	82	1	7	104	28	0	43	138	7	0	52	210	11	0	869
8:15 AM	25	126	87	0	12	83	22	0	19	170	7	0	46	228	9	0	834
8:30 AM	9	95	56	0	7	68	43	0	26	120	8	0	41	183	12	0	668
8:45 AM	11	92	43	1	8	71	29	0	26	104	9	0	26	159	12	0	591
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	122	878	489	2	64	822	287	0	212	971	65	0	387	1780	94	1	6174
APPROACH %'s :	8.18%	58.89%	32.80%	0.13%	5.46%	70.08%	24.47%	0.00%	16.99%	77.80%	5.21%	0.00%	17.11%	78.69%	4.16%	0.04%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	72	549	309	1	39	515	143	0	119	579	34	0	230	918	49	1	3558
PEAK HR FACTOR :	0.720	0.812	0.888	0.250	0.813	0.757	0.761	0.000	0.692	0.851	0.607	0.000	0.821	0.863	0.721	0.250	0.928
	0.865				0.771				0.871				0.878				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	103	95	0	19	131	40	0	52	234	21	0	63	154	12	0	930
4:15 PM	8	111	84	0	36	205	47	0	43	264	23	0	58	147	6	0	1032
4:30 PM	8	101	79	0	29	171	39	0	52	257	28	0	54	142	15	0	975
4:45 PM	5	115	78	0	29	158	36	0	40	266	24	0	45	153	15	0	964
5:00 PM	8	111	77	0	25	224	45	0	65	255	27	0	64	130	15	0	1046
5:15 PM	5	124	107	0	21	214	42	0	57	281	27	0	74	218	13	0	1183
5:30 PM	15	104	83	0	30	198	39	0	52	290	29	1	77	194	18	1	1131
5:45 PM	6	118	75	1	24	185	48	0	43	266	19	0	75	157	15	1	1033
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	61	887	678	1	213	1486	336	0	404	2113	198	1	510	1295	109	2	8294
APPROACH %'s :	3.75%	54.52%	41.67%	0.06%	10.47%	73.02%	16.51%	0.00%	14.87%	77.80%	7.29%	0.04%	26.62%	67.59%	5.69%	0.10%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	34	457	342	1	100	821	174	0	217	1092	102	1	290	699	61	2	4393
PEAK HR FACTOR :	0.567	0.921	0.799	0.250	0.833	0.916	0.906	0.000	0.835	0.941	0.879	0.250	0.942	0.802	0.847	0.500	0.928
	0.883				0.931				0.949				0.862				

Prepared by National Data & Surveying Services

Main St & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05081-004
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

SOUTHBOUND (Main St)

AM	143	515	39	0	717	AM
NOON	0	0	0	0	0	NOON
PM	174	821	100	0	735	PM
	0	2	1	0		

EASTBOUND (Del Amo Blvd)

AM	NOON	PM	
1133	0	908	
0	0	1	0
119	0	217	1
579	0	1092	3
34	0	102	0

WESTBOUND (Del Amo Blvd)

PM	NOON	AM	
61	0	49	0
699	0	918	3
290	0	230	1
2	0	1	0
1536	0	928	

CONTROL

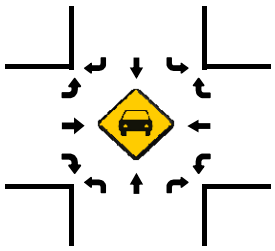
Signalized

TEV	3558 AM	0 NOON	4393 PM
PHF	0.93		0.93

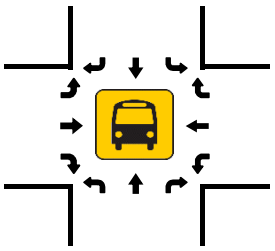
NORTHBOUND (Main St)

PM	1214	1	34	457	342	PM
NOON	0	0	0	0	0	NOON
AM	780	1	72	549	309	AM
		0	1	2	0	

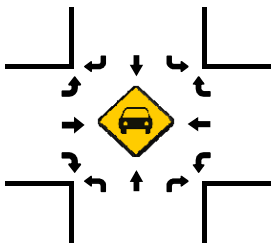
Total Vehicles (AM)



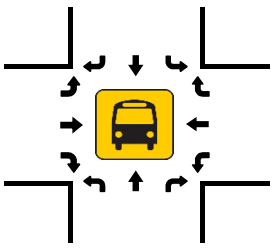
Total Vehicles (AM)



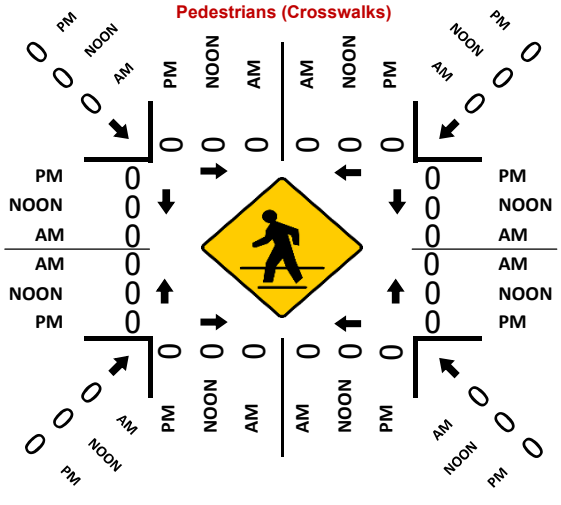
Total Vehicles (NOON)



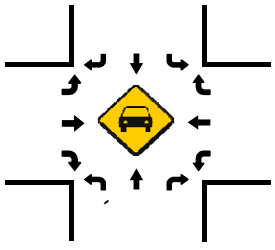
Total Vehicles (NOON)



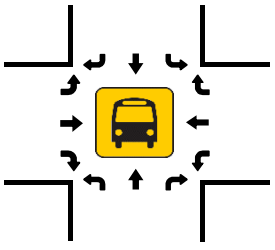
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Main St & Torrance Blvd
City: Carson
Control: Signalized

Project ID: 18-05081-005
Date: 2/1/2018

Total

NS/EW Streets:	Main St				Main St				Torrance Blvd				Torrance Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	1	2	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	64	85	0	0	1	65	42	1	31	2	30	0	1	19	12	0	353
7:15 AM	71	99	0	0	2	131	53	1	28	3	36	0	0	16	4	0	444
7:30 AM	85	138	0	0	2	156	72	0	60	7	41	0	6	24	6	0	597
7:45 AM	76	173	1	0	3	187	61	1	61	1	58	1	4	10	14	0	651
8:00 AM	89	160	5	0	3	113	52	1	88	6	43	0	2	9	9	0	580
8:15 AM	59	139	1	0	1	82	46	2	68	4	39	0	1	11	3	0	456
8:30 AM	47	100	1	0	2	77	40	0	67	7	29	0	2	13	8	0	393
8:45 AM	58	92	1	1	1	63	48	0	46	5	34	0	2	10	4	0	365
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	549	986	9	1	15	874	414	6	449	35	310	1	18	112	60	0	3839
APPROACH %'s :	35.53%	63.82%	0.58%	0.06%	1.15%	66.77%	31.63%	0.46%	56.48%	4.40%	38.99%	0.13%	9.47%	58.95%	31.58%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	309	610	7	0	9	538	231	4	277	18	181	1	13	54	32	0	2284
PEAK HR FACTOR :	0.868	0.882	0.350	0.000	0.750	0.719	0.802	0.500	0.787	0.643	0.780	0.250	0.542	0.563	0.571	0.000	0.877
	0.911				0.776				0.870				0.688				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	1	2	1	0	0.5	0.5	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	48	101	0	1	6	145	65	2	81	11	118	0	0	9	5	0	592
4:15 PM	56	113	2	0	9	190	92	0	83	12	124	0	0	9	3	0	693
4:30 PM	50	100	3	0	11	194	62	0	106	12	105	0	1	10	2	0	656
4:45 PM	49	107	5	0	9	177	52	0	99	15	117	0	2	8	3	0	643
5:00 PM	43	111	4	0	7	222	78	0	86	9	134	0	2	7	5	0	708
5:15 PM	43	102	2	0	12	209	72	1	113	18	110	0	1	3	6	0	692
5:30 PM	51	109	2	0	8	209	93	1	98	17	116	0	1	4	7	0	716
5:45 PM	49	108	3	0	7	189	66	2	82	13	118	0	2	3	9	0	651
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	389	851	21	1	69	1535	580	6	748	107	942	0	9	53	40	0	5351
APPROACH %'s :	30.82%	67.43%	1.66%	0.08%	3.15%	70.09%	26.48%	0.27%	41.62%	5.95%	52.42%	0.00%	8.82%	51.96%	39.22%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	186	430	11	0	34	829	309	4	379	57	478	0	6	17	27	0	2767
PEAK HR FACTOR :	0.912	0.968	0.688	0.000	0.708	0.934	0.831	0.500	0.838	0.792	0.892	0.000	0.750	0.607	0.750	0.000	0.966
	0.968				0.945				0.948				0.893				

Prepared by National Data & Surveying Services

Main St & Torrance Blvd

Peak Hour Turning Movement Count

ID: 18-05081-005
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	231	538	9	4	923	AM
NOON	0	0	0	0	0	NOON
PM	309	829	34	4	840	PM
	1	2	1	0		

Torrance Blvd — EASTBOUND

AM	NOON	PM		
595	0	512		
1	0	0	0	
277	0	379	0.5	
18	0	57	0.5	
181	0	478	1	
AM	NOON	PM		

CONTROL

Signalized

TEV	2284 AM	0 NOON	2767 PM
PHF	0.88		0.97

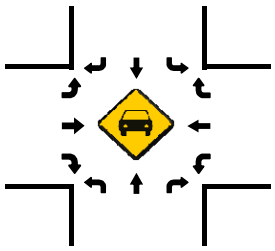
Torrance Blvd — WESTBOUND

PM	NOON	AM	
27	0	32	0
17	0	54	1
6	0	13	0
0	0	0	0
102	0	34	
PM	NOON	AM	

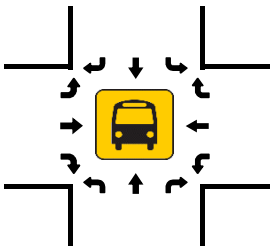
Main St — NORTHBOUND

	0	2	2	0		
PM	1313	0	186	430	11	PM
NOON	0	0	0	0	0	NOON
AM	732	0	309	610	7	AM

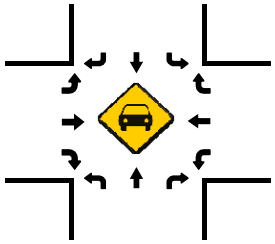
Total Vehicles (AM)



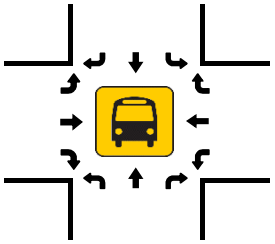
Total Vehicles (AM)



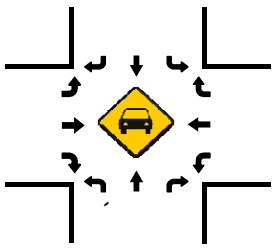
Total Vehicles (NOON)



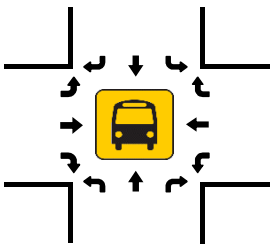
Total Vehicles (NOON)



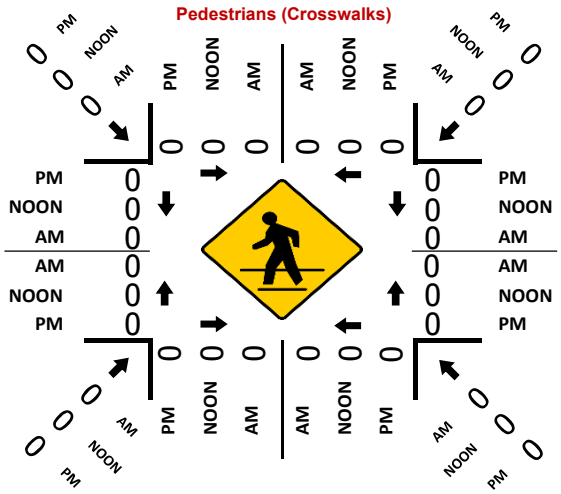
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Artesia Blvd/SR 91 WB On Ramp
City: Carson
Control: Signalized

Project ID: 18-05081-006
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Artesia Blvd/SR 91 WB On Ramp				Artesia Blvd/SR 91 WB On Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	160	27	0	24	152	0	0	0	0	0	0	92	0	146	0	601
7:15 AM	0	184	33	0	48	219	0	0	0	0	0	0	73	0	117	0	674
7:30 AM	0	196	39	0	47	264	0	0	0	0	0	0	95	0	170	0	811
7:45 AM	0	312	43	0	40	302	0	0	0	0	0	0	82	0	177	0	956
8:00 AM	0	220	45	0	42	303	0	0	0	0	0	0	84	0	136	0	830
8:15 AM	0	206	50	0	28	194	0	0	0	0	0	0	71	0	113	1	663
8:30 AM	0	201	51	0	36	208	0	0	0	0	0	0	78	0	117	0	691
8:45 AM	0	165	35	0	26	174	0	0	0	0	0	0	77	0	139	2	618
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1644	323	0	291	1816	0	0	0	0	0	0	652	0	1115	3	5844
APPROACH %'s :	0.00%	83.58%	16.42%	0.00%	13.81%	86.19%	0.00%	0.00%					36.84%	0.00%	62.99%	0.17%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	912	160	0	177	1088	0	0	0	0	0	0	334	0	600	0	3271
PEAK HR FACTOR :	0.000	0.731	0.889	0.000	0.922	0.898	0.000	0.000	0.000	0.000	0.000	0.000	0.879	0.000	0.847	0.000	0.855
		0.755				0.917								0.881			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	296	84	1	48	279	0	0	0	0	0	0	62	0	95	0	865
4:15 PM	0	241	46	0	45	240	0	0	0	0	0	0	88	0	163	2	825
4:30 PM	0	236	36	0	42	276	0	0	0	0	0	0	89	0	101	0	780
4:45 PM	0	289	50	1	38	227	0	0	0	0	0	0	81	0	125	1	812
5:00 PM	0	267	58	0	51	315	0	0	0	0	0	0	72	0	112	0	875
5:15 PM	0	324	54	0	40	273	0	0	0	0	0	0	112	0	114	3	920
5:30 PM	0	299	55	0	34	243	0	0	0	0	0	0	85	0	98	0	814
5:45 PM	0	248	31	0	36	230	0	0	0	0	0	0	74	0	83	0	702
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2200	414	2	334	2083	0	0	0	0	0	0	663	0	891	6	6593
APPROACH %'s :	0.00%	84.10%	15.83%	0.08%	13.82%	86.18%	0.00%	0.00%					42.50%	0.00%	57.12%	0.38%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1179	217	1	163	1058	0	0	0	0	0	0	350	0	449	4	3421
PEAK HR FACTOR :	0.000	0.910	0.935	0.250	0.799	0.840	0.000	0.000	0.000	0.000	0.000	0.000	0.781	0.000	0.898	0.333	0.930
		0.924				0.834								0.877			

Prepared by National Data & Surveying Services

Avalon Blvd & Artesia Blvd/SR 91 WB On Ramp

Peak Hour Turning Movement Count

ID: 18-05081-006
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	0	1088	177	0	1512	AM
NOON	0	0	0	0	0	NOON
PM	0	1058	163	0	1628	PM

Artesia Blvd/SR 91 WB On Ramp — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

WESTBOUND — Artesia Blvd/SR 91 WB On Ramp

PM	NOON	AM	
449	0	600	1.5
0	0	0	0
350	0	334	1.5
4	0	0	0
384	0	337	
PM	NOON	AM	

Avalon Blvd — NORTHBOUND

PM	1409	1	0	1179	217	PM
NOON	0	0	0	0	0	NOON
AM	1422	0	0	912	160	AM

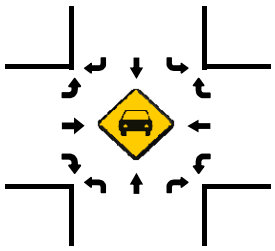
	0	3	2	0
	0	0	3	1

CONTROL

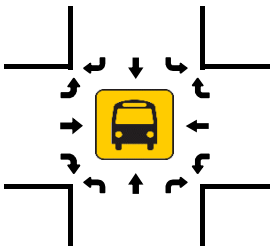
Signalized

TEV	3271	0	3421
	AM	NOON	PM
PHF	0.86		0.93

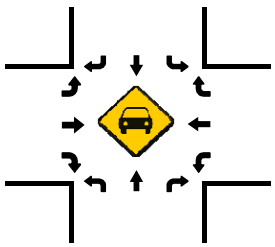
Total Vehicles (AM)



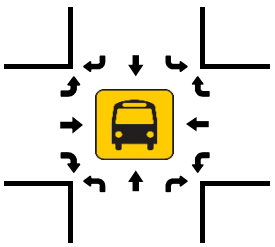
Total Vehicles (AM)



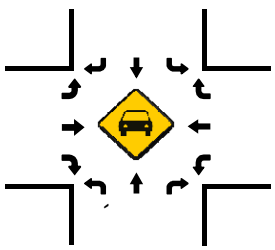
Total Vehicles (NOON)



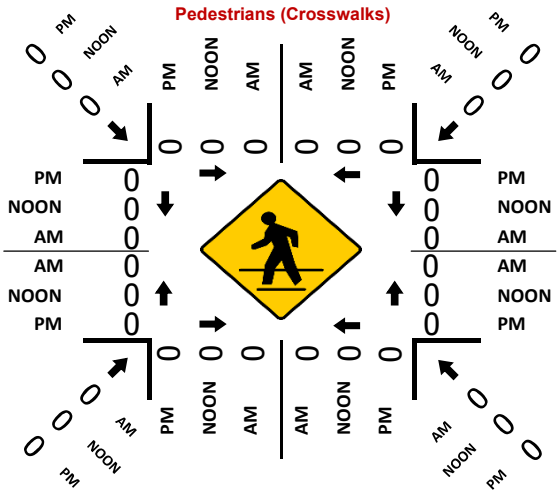
Total Vehicles (NOON)



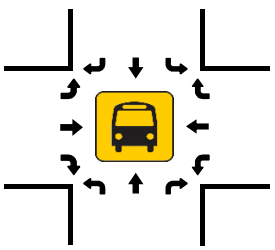
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Albertoni St
City: Carson
Control: Signalized

Project ID: 18-05081-007
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Albertoni St				Albertoni St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	1	1.5	1.5	0	1	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	44	119	37	1	67	88	74	4	19	24	23	0	8	2	47	2	559
7:15 AM	51	143	39	1	65	130	84	2	28	22	36	0	12	4	42	1	660
7:30 AM	40	167	40	1	77	150	109	5	37	26	45	0	17	5	39	1	759
7:45 AM	41	214	38	0	67	188	101	11	64	25	78	0	20	5	83	0	935
8:00 AM	53	166	32	1	90	192	96	6	44	42	96	0	20	7	63	1	909
8:15 AM	43	168	40	2	77	126	70	6	36	34	92	0	20	3	50	1	768
8:30 AM	47	155	40	0	70	120	79	7	40	27	77	1	12	2	54	1	732
8:45 AM	27	133	41	3	57	98	77	1	41	32	64	0	15	5	42	0	636
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	346	1265	307	9	570	1092	690	42	309	232	511	1	124	33	420	7	5958
APPROACH %'s :	17.96%	65.65%	15.93%	0.47%	23.81%	45.61%	28.82%	1.75%	29.34%	22.03%	48.53%	0.09%	21.23%	5.65%	71.92%	1.20%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	177	715	150	4	311	656	376	28	181	127	311	0	77	20	235	3	3371
PEAK HR FACTOR :	0.835	0.835	0.938	0.500	0.864	0.854	0.862	0.636	0.707	0.756	0.810	0.000	0.963	0.714	0.708	0.750	0.901
	0.892				0.893				0.850				0.775				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	1	1.5	1.5	0	1	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	57	220	43	5	73	183	61	5	64	163	121	0	27	8	65	5	1100
4:15 PM	50	207	40	3	58	201	57	2	54	166	129	0	23	6	40	6	1042
4:30 PM	46	148	41	0	67	221	50	2	65	185	140	0	26	10	52	3	1056
4:45 PM	57	209	37	3	47	202	65	4	68	193	157	0	19	3	54	7	1125
5:00 PM	53	208	31	3	70	205	70	4	71	201	142	0	28	7	47	6	1146
5:15 PM	68	240	38	1	64	244	57	3	77	203	131	0	22	5	48	2	1203
5:30 PM	58	240	41	0	61	240	71	8	71	190	156	0	12	6	40	7	1201
5:45 PM	50	162	38	2	63	182	38	5	59	189	126	0	27	13	58	3	1015
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	439	1634	309	17	503	1678	469	33	529	1490	1102	0	184	58	404	39	8888
APPROACH %'s :	18.30%	68.11%	12.88%	0.71%	18.75%	62.54%	17.48%	1.23%	16.95%	47.74%	35.31%	0.00%	26.86%	8.47%	58.98%	5.69%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	236	897	147	7	242	891	263	19	287	787	586	0	81	21	189	22	4675
PEAK HR FACTOR :	0.868	0.934	0.896	0.583	0.864	0.913	0.926	0.594	0.932	0.969	0.933	0.000	0.723	0.750	0.875	0.786	0.972
	0.927				0.931				0.993				0.889				

Prepared by National Data & Surveying Services

Avalon Blvd & Albertoni St

Peak Hour Turning Movement Count

ID: 18-05081-007
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	376	656	311	28	1159	AM
NOON	0	0	0	0	0	NOON
PM	263	891	242	19	1392	PM
	0	3	1	0		

Albertoni St — EASTBOUND

AM	NOON	PM	
573	0	520	
0	0	0	0
181	0	287	1
127	0	787	1.5
311	0	586	1.5
AM	NOON	PM	

CONTROL

Signalized

TEV	3371 AM	0 NOON	4675 PM
PHF	0.90		0.97

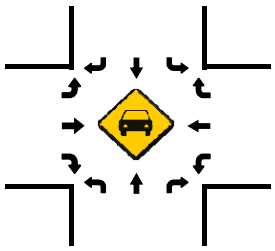
WESTBOUND — Albertoni St

	PM	NOON	AM
1.5	189	0	235
1.5	21	0	20
1	81	0	77
0	22	0	3
	1198	0	591
	PM	NOON	AM

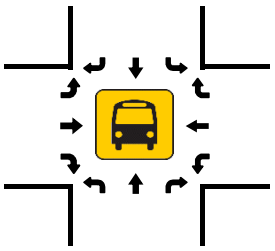
Avalon Blvd — NORTHBOUND

PM	1565	7	236	897	147	PM
NOON	0	0	0	0	0	NOON
AM	1048	4	177	715	150	AM
		0	1	3	1	

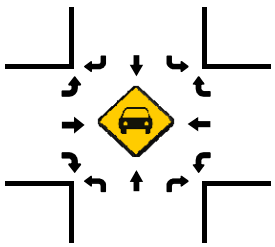
Total Vehicles (AM)



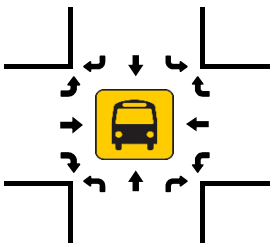
Total Vehicles (AM)



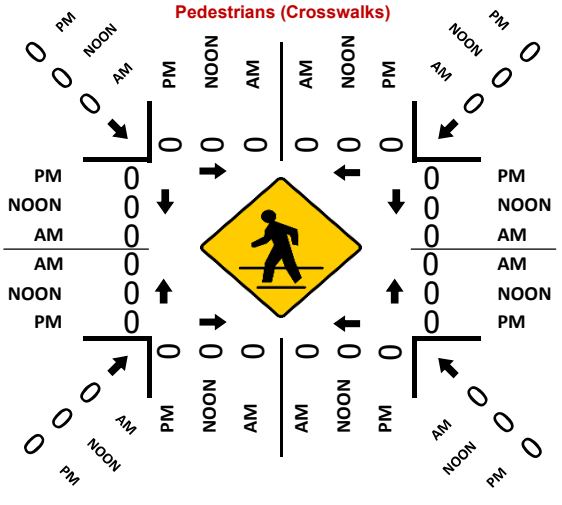
Total Vehicles (NOON)



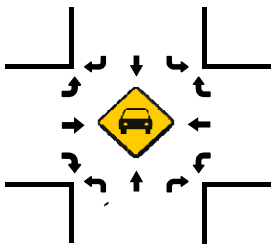
Total Vehicles (NOON)



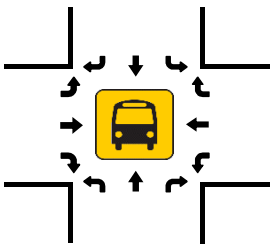
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Victoria St
City: Carson
Control: Signalized

Project ID: 18-05081-008
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Victoria St				Victoria St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	16	123	15	3	21	74	29	1	20	46	4	0	8	111	39	0	510
7:15 AM	23	148	24	2	30	122	18	3	31	49	17	0	17	125	41	0	650
7:30 AM	34	136	28	0	45	164	27	3	21	87	23	0	23	147	55	0	793
7:45 AM	36	211	36	2	82	200	17	2	20	111	27	0	20	88	64	0	916
8:00 AM	33	163	71	3	112	172	13	3	21	150	15	0	23	90	52	0	921
8:15 AM	27	175	66	1	130	149	21	2	23	149	16	0	31	91	50	0	931
8:30 AM	21	141	42	1	74	116	23	7	19	81	20	0	31	98	63	0	737
8:45 AM	24	129	34	3	58	115	19	2	23	93	17	0	26	82	38	0	663
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	214	1226	316	15	552	1112	167	23	178	766	139	0	179	832	402	0	6121
APPROACH %'s :	12.08%	69.23%	17.84%	0.85%	29.77%	59.98%	9.01%	1.24%	16.44%	70.73%	12.83%	0.00%	12.67%	58.88%	28.45%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	130	685	201	6	369	685	78	10	85	497	81	0	97	416	221	0	3561
PEAK HR FACTOR :	0.903	0.812	0.708	0.500	0.710	0.856	0.722	0.833	0.924	0.828	0.750	0.000	0.782	0.707	0.863	0.000	0.956
	0.896				0.945				0.882				0.816				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	30	183	41	5	75	215	21	2	27	115	45	0	60	165	94	0	1078
4:15 PM	21	205	57	4	83	260	20	8	35	113	35	0	41	88	54	0	1024
4:30 PM	32	160	56	8	85	221	14	5	24	128	41	0	35	128	52	0	989
4:45 PM	28	226	64	3	110	285	22	5	18	135	23	0	32	89	64	0	1104
5:00 PM	29	183	51	10	103	189	16	4	31	189	37	0	53	185	83	0	1163
5:15 PM	30	230	65	7	111	276	20	7	32	159	49	0	47	213	116	0	1362
5:30 PM	34	189	47	8	85	230	27	2	33	154	33	0	54	198	90	0	1184
5:45 PM	32	189	70	3	84	270	17	3	22	131	45	0	43	120	46	0	1075
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	236	1565	451	48	736	1946	157	36	222	1124	308	0	365	1186	599	0	8979
APPROACH %'s :	10.26%	68.04%	19.61%	2.09%	25.60%	67.69%	5.46%	1.25%	13.42%	67.96%	18.62%	0.00%	16.98%	55.16%	27.86%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	121	828	227	28	409	980	85	18	114	637	142	0	186	685	353	0	4813
PEAK HR FACTOR :	0.890	0.900	0.873	0.700	0.921	0.860	0.787	0.643	0.864	0.843	0.724	0.000	0.861	0.804	0.761	0.000	0.883
	0.907				0.884				0.869				0.814				

Prepared by National Data & Surveying Services

Avalon Blvd & Victoria St

Peak Hour Turning Movement Count

ID: 18-05081-008
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	78	685	369	10	1001	AM
NOON	0	0	0	0	0	NOON
PM	85	980	409	18	1313	PM
	0	3	2	0		

Victoria St — EASTBOUND

AM	NOON	PM	
624	0	891	
0	0	0	0
85	0	114	1
497	0	637	2
81	0	142	1
AM	NOON	PM	

CONTROL

Signalized

TEV	3561 AM	0 NOON	4813 PM
PHF	0.96		0.88

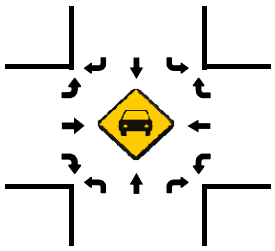
WESTBOUND — Victoria St

PM	NOON	AM	
353	0	221	1
685	0	416	2
186	0	97	1
0	0	0	0
1273	0	1067	
PM	NOON	AM	

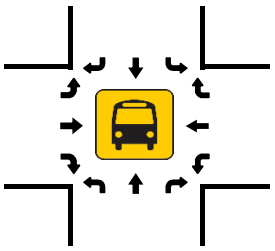
Avalon Blvd — NORTHBOUND

PM	1336	28	121	828	227	PM
NOON	0	0	0	0	0	NOON
AM	869	6	130	685	201	AM
		0	1	3	1	

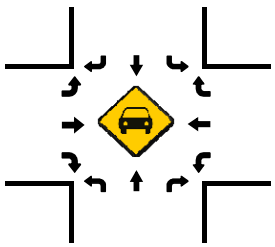
Total Vehicles (AM)



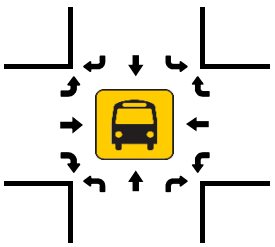
Total Vehicles (AM)



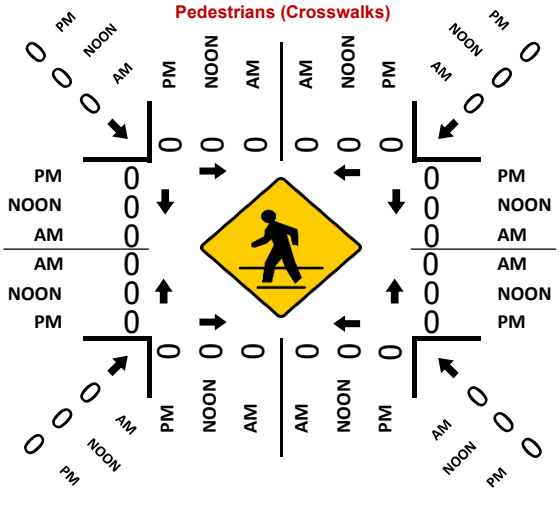
Total Vehicles (NOON)



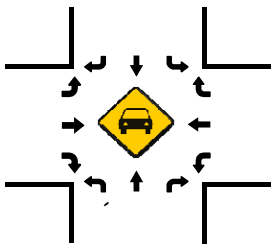
Total Vehicles (NOON)



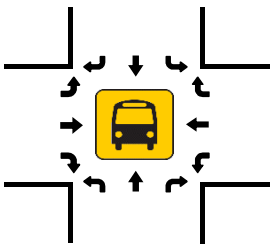
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & 184th St/StubHub Center Gate
City: Carson
Control: Signalized

Project ID: 18-05081-009
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				184th St/StubHub Center Gate				184th St/StubHub Center Gate				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	0.5	0	0.5	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	167	5	1	6	99	0	0	9	0	6	0	1	0	2	0	298
7:15 AM	2	192	9	0	7	147	1	0	11	0	6	0	0	0	1	0	376
7:30 AM	7	207	11	0	9	229	2	0	11	0	18	0	0	0	2	0	496
7:45 AM	0	255	20	0	13	225	1	0	11	0	13	0	1	0	0	0	539
8:00 AM	4	276	19	2	7	202	2	0	16	0	6	0	3	0	6	0	543
8:15 AM	5	229	12	1	8	174	3	0	19	0	8	0	4	0	3	0	466
8:30 AM	4	193	23	0	17	162	2	1	6	0	5	0	2	0	7	0	422
8:45 AM	3	185	24	2	16	117	2	0	9	0	5	0	1	0	2	0	366
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	27	1704	123	6	83	1355	13	1	92	0	67	0	12	0	23	0	3506
APPROACH %'s :	1.45%	91.61%	6.61%	0.32%	5.72%	93.32%	0.90%	0.07%	57.86%	0.00%	42.14%	0.00%	34.29%	0.00%	65.71%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	16	967	62	3	37	830	8	0	57	0	45	0	8	0	11	0	2044
PEAK HR FACTOR :	0.571	0.876	0.775	0.375	0.712	0.906	0.667	0.000	0.750	0.000	0.625	0.000	0.500	0.000	0.458	0.000	0.941
	0.870				0.911				0.879				0.528				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	1	3	0	0	0.5	0	0.5	0	1.5	0	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	282	15	3	29	277	10	1	12	0	8	0	17	0	17	0	679
4:15 PM	5	236	16	2	32	288	4	2	16	0	8	0	19	0	14	0	642
4:30 PM	6	266	8	3	8	319	15	0	14	0	12	0	22	0	14	0	687
4:45 PM	10	244	6	2	11	294	5	0	20	0	6	0	10	0	9	0	617
5:00 PM	9	263	7	3	3	277	11	0	17	0	4	0	15	0	16	0	625
5:15 PM	4	276	9	1	12	334	5	0	21	0	6	0	14	0	13	0	695
5:30 PM	4	257	10	0	15	274	7	2	19	0	13	0	12	0	9	0	622
5:45 PM	11	284	13	2	23	342	10	0	16	0	7	0	9	0	10	0	727
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	57	2108	84	16	133	2405	67	5	135	0	64	0	118	0	102	0	5294
APPROACH %'s :	2.52%	93.07%	3.71%	0.71%	5.10%	92.15%	2.57%	0.19%	67.84%	0.00%	32.16%	0.00%	53.64%	0.00%	46.36%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	28	1080	39	6	53	1227	33	2	73	0	30	0	50	0	48	0	2669
PEAK HR FACTOR :	0.636	0.951	0.750	0.500	0.576	0.897	0.750	0.250	0.869	0.000	0.577	0.000	0.833	0.000	0.750	0.000	0.918
	0.930				0.877				0.805				0.790				

Prepared by National Data & Surveying Services

Avalon Blvd & 184th St/StubHub Center Gate

Peak Hour Turning Movement Count

ID: 18-05081-009
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	8	830	37	0	1035	AM
NOON	0	0	0	0	0	NOON
PM	33	1227	53	2	1203	PM
	0	3	1	0		

184th St/StubHub Center Gate — EASTBOUND

AM	NOON	PM	
24	0	61	
0	0	0	0
57	0	73	0.5
0	0	0	0
45	0	30	0.5

CONTROL

Signalized

TEV	2044 AM	0 NOON	2669 PM
PHF	0.94		0.92

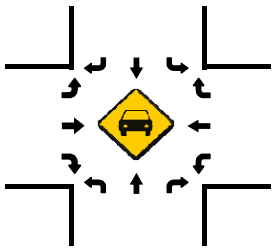
184th St/StubHub Center Gate — WESTBOUND

PM	NOON	AM	
48	0	11	1.5
0	0	0	0
50	0	8	1.5
0	0	0	0
92	0	99	

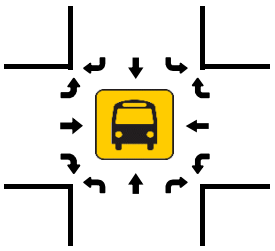
Avalon Blvd — NORTHBOUND

PM	1313	6	28	1080	39	PM
NOON	0	0	0	0	0	NOON
AM	886	3	16	967	62	AM
		0	1	3	1	

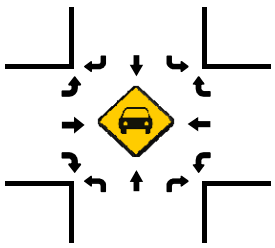
Total Vehicles (AM)



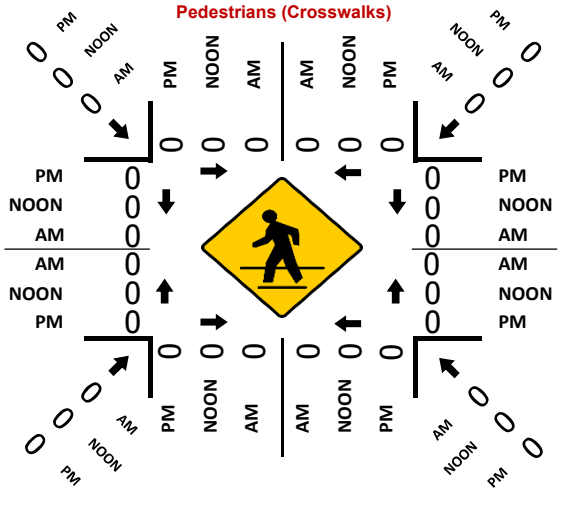
Total Vehicles (AM)



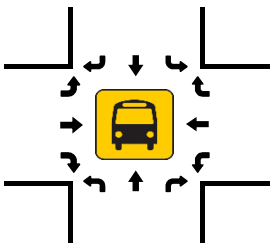
Total Vehicles (NOON)



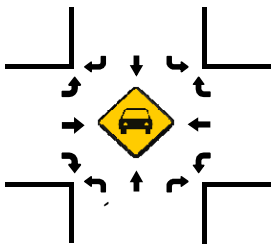
Pedestrians (Crosswalks)



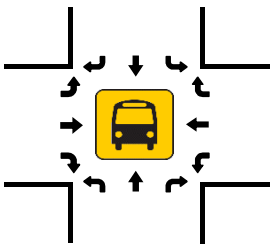
Total Vehicles (NOON)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & University Dr
City: Carson
Control: Signalized

Project ID: 18-05081-010
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				University Dr				University Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	117	25	0	11	114	0	1	0	0	0	0	35	0	54	1	358
7:15 AM	0	128	54	0	32	111	0	4	0	0	0	0	40	0	70	0	439
7:30 AM	0	142	59	0	47	208	0	3	0	0	0	0	42	0	78	0	579
7:45 AM	0	210	94	0	83	184	0	4	0	0	0	0	48	0	84	0	707
8:00 AM	0	251	105	0	71	164	0	14	0	0	0	0	49	0	78	0	732
8:15 AM	0	188	134	0	52	134	0	15	0	0	0	0	68	0	55	0	646
8:30 AM	0	180	143	0	41	112	0	9	0	0	0	0	82	0	54	0	621
8:45 AM	0	167	78	0	33	99	0	12	0	0	0	0	57	0	44	0	490
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1383	692	0	370	1126	0	62	0	0	0	0	421	0	517	1	4572
APPROACH %'s :	0.00%	66.65%	33.35%	0.00%	23.75%	72.27%	0.00%	3.98%					44.83%	0.00%	55.06%	0.11%	
PEAK HR :	**07:45 AM - 08:45 AM**																TOTAL
PEAK HR VOL :	0	829	476	0	247	594	0	42	0	0	0	0	247	0	271	0	2706
PEAK HR FACTOR :	0.000	0.826	0.832	0.000	0.744	0.807	0.000	0.700	0.000	0.000	0.000	0.000	0.753	0.000	0.807	0.000	0.924
		0.916				0.815								0.952			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	1	0	2	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	237	63	0	48	243	0	29	0	0	0	0	152	0	56	0	828
4:15 PM	0	237	94	0	65	237	0	24	0	0	0	0	89	0	40	0	786
4:30 PM	0	211	80	0	62	256	0	27	0	0	0	0	84	0	52	0	772
4:45 PM	0	238	95	0	61	241	0	20	0	0	0	0	76	0	47	0	778
5:00 PM	0	236	88	0	58	231	0	21	0	0	0	0	101	0	51	0	786
5:15 PM	0	241	101	0	66	281	0	28	0	0	0	0	136	0	60	0	913
5:30 PM	0	241	79	0	62	243	0	22	0	0	0	0	131	0	63	0	841
5:45 PM	0	243	62	0	76	278	0	18	0	0	0	0	103	0	59	0	839
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1884	662	0	498	2010	0	189	0	0	0	0	872	0	428	0	6543
APPROACH %'s :	0.00%	74.00%	26.00%	0.00%	18.46%	74.53%	0.00%	7.01%					67.08%	0.00%	32.92%	0.00%	
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	0	961	330	0	262	1033	0	89	0	0	0	0	471	0	233	0	3379
PEAK HR FACTOR :	0.000	0.989	0.817	0.000	0.862	0.919	0.000	0.795	0.000	0.000	0.000	0.000	0.866	0.000	0.925	0.000	0.925
		0.944				0.923								0.898			

Prepared by National Data & Surveying Services

Avalon Blvd & University Dr

Peak Hour Turning Movement Count

ID: 18-05081-010
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS		COUNT PERIODS
07:45 AM - 08:45 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	0	594	247	42	1142	AM
NOON	0	0	0	0	0	NOON
PM	0	1033	262	89	1283	PM

0 3 2 0

University Dr — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

University Dr — WESTBOUND

	PM	NOON	AM
1	233	0	271
0	0	0	0
1	471	0	247
0	0	0	0
	592	0	723
	PM	NOON	AM

CONTROL

Signalized

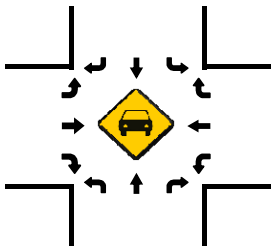
	AM	NOON	PM
TEV	2706	0	3379
PHF	0.92		0.93

0 0 3 1

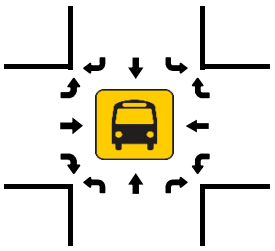
Avalon Blvd — NORTHBOUND

PM	1504	0	0	961	330	PM
NOON	0	0	0	0	0	NOON
AM	841	0	0	829	476	AM

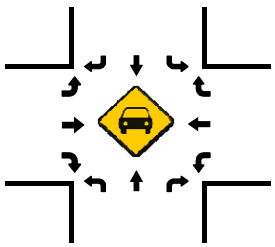
Total Vehicles (AM)



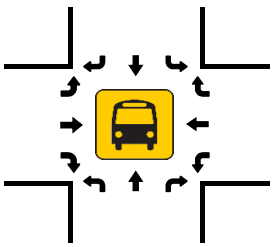
Total Vehicles (AM)



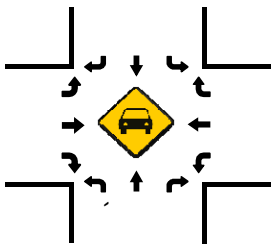
Total Vehicles (NOON)



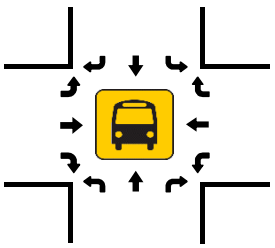
Total Vehicles (NOON)



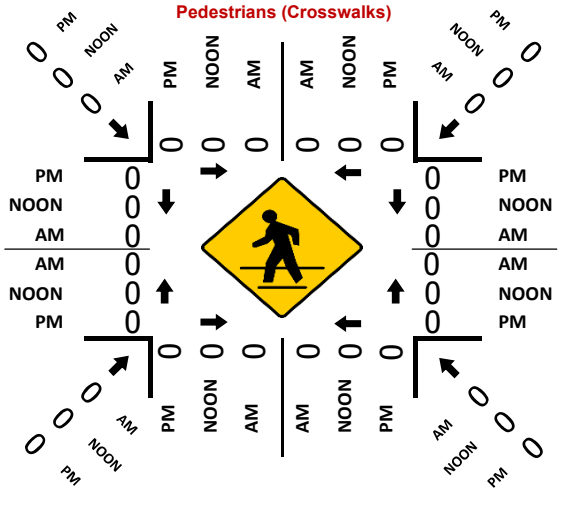
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & 192nd St
City: Carson
Control: Signalized

Project ID: 18-05081-011
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				192nd St				192nd St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	0	3	0	0	1	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	16	133	0	0	0	119	13	0	7	0	6	0	0	0	0	0	294
7:15 AM	17	183	0	0	0	143	25	0	16	0	14	0	0	0	0	0	398
7:30 AM	21	179	0	0	0	210	25	0	15	0	17	0	0	0	0	0	467
7:45 AM	39	275	0	1	0	201	29	0	31	0	21	0	0	0	0	0	597
8:00 AM	41	324	0	2	0	173	31	0	23	0	14	0	0	0	0	0	608
8:15 AM	20	300	0	0	0	180	21	0	22	0	9	0	0	0	0	0	552
8:30 AM	13	305	0	1	0	173	19	0	31	0	11	0	0	0	0	0	553
8:45 AM	21	198	0	0	0	151	16	0	19	0	10	0	0	0	0	0	415
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	188	1897	0	4	0	1350	179	0	164	0	102	0	0	0	0	0	3884
APPROACH %'s :	9.00%	90.81%	0.00%	0.19%	0.00%	88.29%	11.71%	0.00%	61.65%	0.00%	38.35%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	113	1204	0	4	0	727	100	0	107	0	55	0	0	0	0	0	2310
PEAK HR FACTOR :	0.689	0.929	0.000	0.500	0.000	0.904	0.806	0.000	0.863	0.000	0.655	0.000	0.000	0.000	0.000	0.000	0.950
	0.900				0.899				0.779								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	0	3	0	0	1	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	17	278	0	0	0	368	14	0	27	0	33	0	0	0	0	0	737
4:15 PM	25	265	0	1	0	300	21	0	46	0	38	0	0	0	0	0	696
4:30 PM	17	250	0	0	0	328	24	0	44	0	38	0	0	0	0	0	701
4:45 PM	12	302	0	0	0	295	13	0	41	0	47	0	0	0	0	0	710
5:00 PM	21	247	0	1	0	300	26	0	55	0	40	0	0	0	0	0	690
5:15 PM	14	307	0	0	0	397	21	0	45	0	45	0	0	0	0	0	829
5:30 PM	29	274	0	0	0	355	18	0	54	0	41	0	0	0	0	0	771
5:45 PM	21	250	0	2	0	366	19	0	44	0	42	0	0	0	0	0	744
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	156	2173	0	4	0	2709	156	0	356	0	324	0	0	0	0	0	5878
APPROACH %'s :	6.69%	93.14%	0.00%	0.17%	0.00%	94.55%	5.45%	0.00%	52.35%	0.00%	47.65%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	85	1078	0	3	0	1418	84	0	198	0	168	0	0	0	0	0	3034
PEAK HR FACTOR :	0.733	0.878	0.000	0.375	0.000	0.893	0.808	0.000	0.900	0.000	0.933	0.000	0.000	0.000	0.000	0.000	0.915
	0.908				0.898				0.963								

Prepared by National Data & Surveying Services

Avalon Blvd & 192nd St

Peak Hour Turning Movement Count

ID: 18-05081-011
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	100	727	0	0	1311	AM
NOON	0	0	0	0	0	NOON
PM	84	1418	0	0	1276	PM

EASTBOUND — 192nd St

AM	NOON	PM	
213	0	169	⇦
0	0	0	↶ 0
107	0	198	↱ 1
0	0	0	→ 0
55	0	168	↴ 1

WESTBOUND — 192nd St

PM	NOON	AM	
0	0	0	↰ 0
0	0	0	← 0
0	0	0	↰ 0
0	0	0	↰ 0
0	0	0	⇨

CONTROL: Signalized

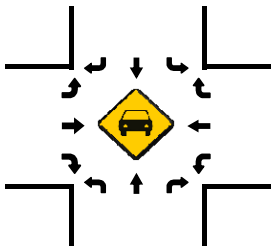
TEV	2310 AM	0 NOON	3034 PM
PHF	0.95		0.91

Avalon Blvd — NORTHBOUND

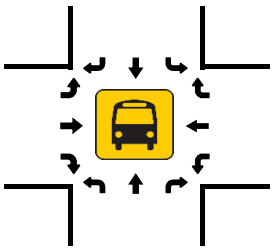
PM	1589	3	85	1078	0	PM
NOON	0	0	0	0	0	NOON
AM	786	4	113	1204	0	AM

0 3 0 0 — 0 1 3 0

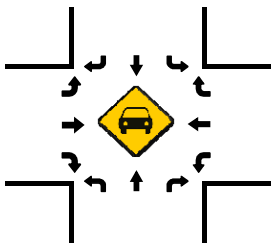
Total Vehicles (AM)



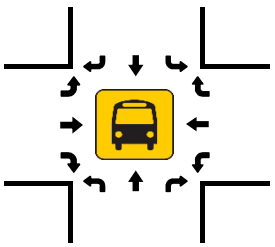
Total Vehicles (AM)



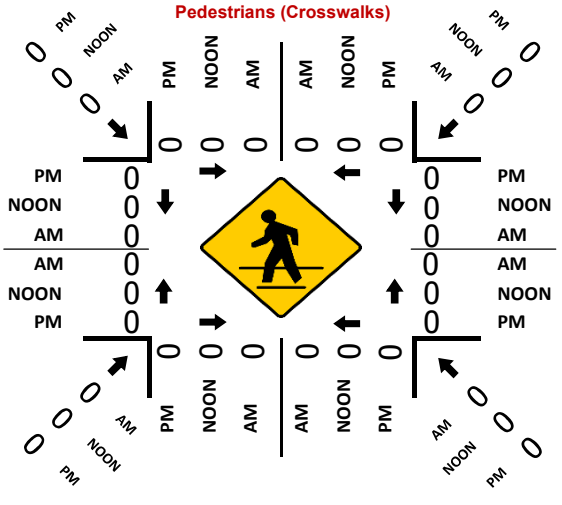
Total Vehicles (NOON)



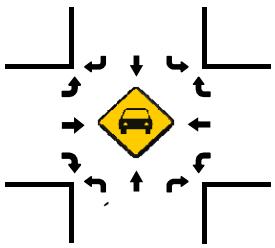
Total Vehicles (NOON)



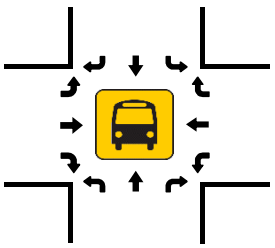
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Elsmere Dr
City: Carson
Control: Signalized

Project ID: 18-05081-012
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Elsmere Dr				Elsmere Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	134	5	0	6	125	0	0	0	0	0	0	10	0	13	0	293
7:15 AM	0	173	5	0	5	142	0	0	0	0	0	0	15	0	16	0	356
7:30 AM	0	190	7	0	7	222	0	0	0	0	0	0	20	0	7	0	453
7:45 AM	0	304	27	0	17	207	0	1	0	0	0	0	30	0	12	0	598
8:00 AM	0	343	17	0	11	185	0	0	0	0	0	0	38	0	14	0	608
8:15 AM	0	327	13	0	4	189	0	0	0	0	0	0	14	0	7	0	554
8:30 AM	0	294	6	0	1	174	0	0	0	0	0	0	14	0	7	0	496
8:45 AM	0	235	6	0	2	174	0	1	0	0	0	0	14	0	7	0	439
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2000	86	0	53	1418	0	2	0	0	0	0	155	0	83	0	3797
APPROACH %'s :	0.00%	95.88%	4.12%	0.00%	3.60%	96.27%	0.00%	0.14%					65.13%	0.00%	34.87%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1268	63	0	33	755	0	1	0	0	0	0	96	0	40	0	2256
PEAK HR FACTOR :	0.000	0.924	0.583	0.000	0.485	0.912	0.000	0.250	0.000	0.000	0.000	0.000	0.632	0.000	0.714	0.000	0.928
		0.924				0.877								0.654			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	281	7	0	17	429	0	1	0	0	0	0	9	0	6	0	750
4:15 PM	0	307	9	0	10	328	0	0	0	0	0	0	6	0	4	0	664
4:30 PM	0	262	19	1	12	330	0	1	0	0	0	0	11	0	5	0	641
4:45 PM	0	296	11	0	16	339	0	1	0	0	0	0	9	0	5	0	677
5:00 PM	0	285	19	0	16	322	0	0	0	0	0	0	4	0	8	0	654
5:15 PM	0	299	17	0	9	428	0	1	0	0	0	0	7	0	8	0	769
5:30 PM	0	283	14	0	12	391	0	1	0	0	0	0	8	0	10	0	719
5:45 PM	0	275	15	0	20	385	0	0	0	0	0	0	9	0	9	0	713
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2288	111	1	112	2952	0	5	0	0	0	0	63	0	55	0	5587
APPROACH %'s :	0.00%	95.33%	4.63%	0.04%	3.65%	96.19%	0.00%	0.16%					53.39%	0.00%	46.61%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1142	65	0	57	1526	0	2	0	0	0	0	28	0	35	0	2855
PEAK HR FACTOR :	0.000	0.955	0.855	0.000	0.713	0.891	0.000	0.500	0.000	0.000	0.000	0.000	0.778	0.000	0.875	0.000	0.928
		0.955				0.905								0.875			

Prepared by National Data & Surveying Services

Avalon Blvd & Elsmere Dr

Peak Hour Turning Movement Count

ID: 18-05081-012
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND (Avalon Blvd)

AM	0	755	33	1	1309	AM
NOON	0	0	0	0	0	NOON
PM	0	1526	57	2	1179	PM

EASTBOUND (Elsmere Dr)

AM	NOON	PM	
0	0	0	⇦
0	0	0	↶ 0
0	0	0	↱ 0
0	0	0	→ 0
0	0	0	↷ 0
AM	NOON	PM	

WESTBOUND (Elsmere Dr)

PM	NOON	AM	
35	0	40	1 ↰
0	0	0	0 ←
28	0	96	1 ↰
0	0	0	0 ↶
122	0	96	⇨
PM	NOON	AM	

NORTHBOUND (Avalon Blvd)

PM	1554	0	0	1142	65	PM
NOON	0	0	0	0	0	NOON
AM	851	0	0	1268	63	AM

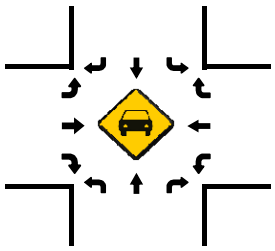
0	3	1	0

0	0	3	0

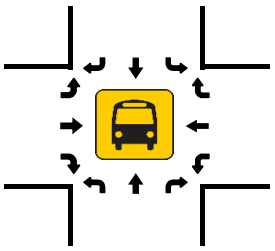
CONTROL: Signalized

TEV	2256 AM	0 NOON	2855 PM
PHF	0.93		0.93

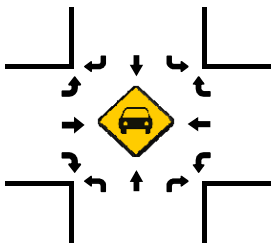
Total Vehicles (AM)



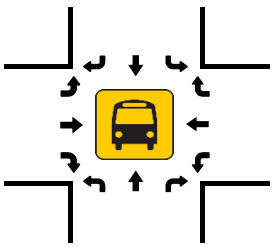
Total Vehicles (AM)



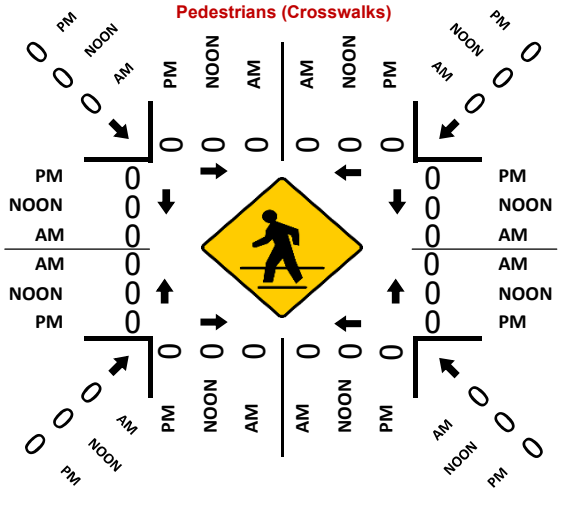
Total Vehicles (NOON)



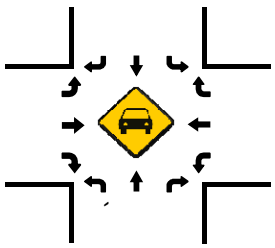
Total Vehicles (NOON)



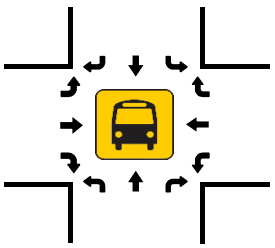
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Turmont St
City: Carson
Control: Signalized

Project ID: 18-05081-013
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Turmont St				Turmont St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	143	16	3	10	136	0	0	0	0	0	0	52	0	18	0	378
7:15 AM	0	176	18	5	7	181	0	0	0	0	0	0	52	0	19	0	458
7:30 AM	0	181	22	12	10	197	0	0	0	0	0	0	53	0	26	0	501
7:45 AM	0	310	38	5	30	198	0	1	0	0	0	0	59	0	41	0	682
8:00 AM	0	325	25	7	17	202	0	0	0	0	0	0	42	0	34	0	652
8:15 AM	0	336	21	5	12	187	0	0	0	0	0	0	32	0	9	0	602
8:30 AM	0	246	30	3	8	203	0	0	0	0	0	0	27	0	18	0	535
8:45 AM	0	216	22	3	5	157	0	0	0	0	0	0	29	0	11	0	443
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1933	192	43	99	1461	0	1	0	0	0	0	346	0	176	0	4251
APPROACH %'s :	0.00%	89.16%	8.86%	1.98%	6.34%	93.59%	0.00%	0.06%					66.28%	0.00%	33.72%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1217	114	20	67	790	0	1	0	0	0	0	160	0	102	0	2471
PEAK HR FACTOR :	0.000	0.906	0.750	0.714	0.558	0.973	0.000	0.250	0.000	0.000	0.000	0.000	0.678	0.000	0.622	0.000	0.906
		0.933				0.937								0.655			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	3	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	300	59	5	17	375	0	0	0	0	0	0	11	0	14	0	781
4:15 PM	0	273	43	12	26	319	0	0	0	0	0	0	27	0	11	0	711
4:30 PM	0	261	37	6	21	338	0	0	0	0	0	0	23	0	15	0	701
4:45 PM	0	313	38	7	20	303	0	0	0	0	0	0	23	0	15	0	719
5:00 PM	0	293	41	9	25	338	0	0	0	0	0	0	14	0	22	0	742
5:15 PM	0	288	40	10	25	405	0	0	0	0	0	0	21	0	11	0	800
5:30 PM	0	292	63	11	24	373	0	0	0	0	0	0	29	0	13	0	805
5:45 PM	0	262	49	6	27	357	0	2	0	0	0	0	20	0	14	0	737
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2282	370	66	185	2808	0	2	0	0	0	0	168	0	115	0	5996
APPROACH %'s :	0.00%	83.96%	13.61%	2.43%	6.18%	93.76%	0.00%	0.07%					59.36%	0.00%	40.64%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1135	193	36	101	1473	0	2	0	0	0	0	84	0	60	0	3084
PEAK HR FACTOR :	0.000	0.968	0.766	0.818	0.935	0.909	0.000	0.250	0.000	0.000	0.000	0.000	0.724	0.000	0.682	0.000	0.958
		0.932				0.916								0.857			

Prepared by National Data & Surveying Services

Avalon Blvd & Turmont St

Peak Hour Turning Movement Count

ID: 18-05081-013
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS		COUNT PERIODS
07:45 AM - 08:45 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
05:00 PM - 06:00 PM	PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	0	790	67	1	1320	AM
NOON	0	0	0	0	0	NOON
PM	0	1473	101	2	1197	PM

0 3 1 0

Turmont St — EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

Turmont St — WESTBOUND

	PM	NOON	AM
1	60	0	102
0	0	0	0
1	84	0	160
0	0	0	0
	294	0	181
	PM	NOON	AM

CONTROL

Signalized

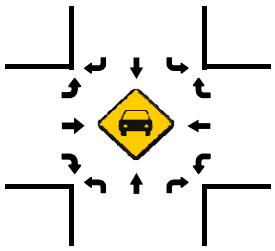
	AM	NOON	PM
TEV	2471	0	3084
PHF	0.91		0.96

0 1 3 0

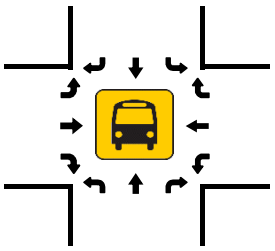
Avalon Blvd — NORTHBOUND

PM	1593	36	0	1135	193	PM
NOON	0	0	0	0	0	NOON
AM	970	20	0	1217	114	AM

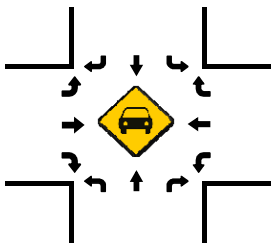
Total Vehicles (AM)



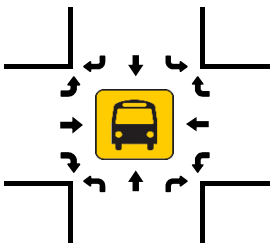
Total Vehicles (AM)



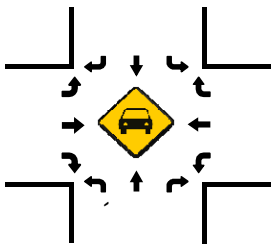
Total Vehicles (NOON)



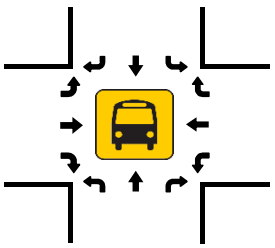
Total Vehicles (NOON)



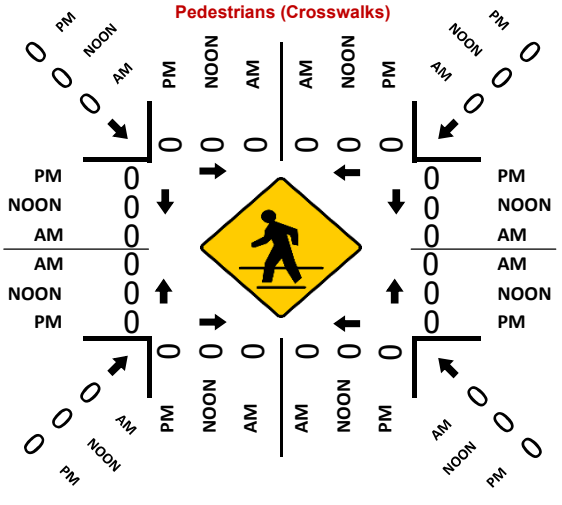
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & Del Amo Blvd
City: Carson
Control: Signalized

Project ID: 18-05081-014
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	31	97	20	7	19	91	54	19	24	70	12	1	36	222	18	8	729
7:15 AM	27	132	30	9	25	121	71	6	32	94	14	2	36	260	27	8	894
7:30 AM	23	126	29	11	23	179	61	23	50	110	18	3	46	262	17	6	987
7:45 AM	34	246	42	9	26	164	67	17	57	154	16	3	30	190	21	9	1085
8:00 AM	26	219	33	8	28	151	56	17	65	131	25	4	40	217	31	5	1056
8:15 AM	27	251	30	7	27	127	62	25	72	139	26	3	41	180	25	7	1049
8:30 AM	15	192	30	11	22	117	56	16	76	92	21	2	41	163	23	5	882
8:45 AM	20	156	21	10	29	128	51	8	51	75	22	2	39	128	22	5	767
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	203	1419	235	72	199	1078	478	131	427	865	154	20	309	1622	184	53	7449
APPROACH %'s :	10.52%	73.56%	12.18%	3.73%	10.55%	57.16%	25.34%	6.95%	29.13%	59.00%	10.50%	1.36%	14.25%	74.82%	8.49%	2.44%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	110	842	134	35	104	621	246	82	244	534	85	13	157	849	94	27	4177
PEAK HR FACTOR :	0.809	0.839	0.798	0.795	0.929	0.867	0.918	0.820	0.847	0.867	0.817	0.813	0.853	0.810	0.758	0.750	0.962
	0.847				0.920				0.913				0.851				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	1	0	2	3	0	0	1	2	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	19	214	54	7	52	261	79	24	55	230	54	1	48	138	33	12	1281
4:15 PM	33	232	47	5	53	220	61	22	55	200	61	0	61	116	42	6	1214
4:30 PM	34	225	57	6	57	228	75	15	46	258	50	3	30	115	28	8	1235
4:45 PM	20	242	45	4	50	223	56	14	53	221	50	4	61	126	47	7	1223
5:00 PM	26	244	39	9	52	177	72	24	40	228	53	1	57	137	27	11	1197
5:15 PM	36	236	44	4	52	277	86	19	45	243	48	0	57	173	31	12	1363
5:30 PM	33	239	51	7	67	247	87	11	56	258	59	0	44	174	41	4	1378
5:45 PM	36	210	51	5	75	227	70	16	37	197	53	2	50	128	41	7	1205
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	237	1842	388	47	458	1860	586	145	387	1835	428	11	408	1107	290	67	10096
APPROACH %'s :	9.43%	73.27%	15.43%	1.87%	15.02%	61.00%	19.22%	4.76%	14.54%	68.96%	16.08%	0.41%	21.79%	59.13%	15.49%	3.58%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	115	961	179	24	221	924	301	68	194	950	210	5	219	610	146	34	5161
PEAK HR FACTOR :	0.799	0.985	0.877	0.667	0.825	0.834	0.865	0.708	0.866	0.921	0.890	0.313	0.898	0.876	0.777	0.708	0.936
	0.969				0.872				0.911				0.924				

Prepared by National Data & Surveying Services

Avalon Blvd & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05081-014
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

SOUTHBOUND — Avalon Blvd

AM	246	621	104	82	1262	AM
NOON	0	0	0	0	0	NOON
PM	301	924	221	68	1369	PM
	0	3	2	0		

EASTBOUND — Del Amo Blvd

AM	NOON	PM	
1218	0	1031	
13	0	5	0
244	0	194	1
534	0	950	2
85	0	210	1

WESTBOUND — Del Amo Blvd

PM	NOON	AM	
146	0	94	1
610	0	849	2
219	0	157	1
34	0	27	0
1384	0	799	

CONTROL

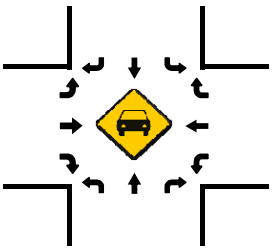
Signalized

TEV	4177 AM	0 NOON	5161 PM
PHF	0.96		0.94

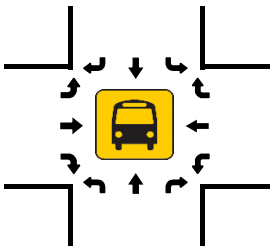
NORTHBOUND — Avalon Blvd

	0	1	3	1		
PM	1377	24	115	961	179	PM
NOON	0	0	0	0	0	NOON
AM	898	35	110	842	134	AM

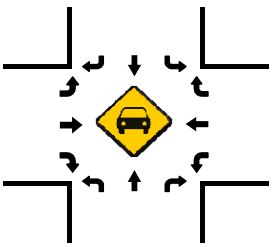
Total Vehicles (AM)



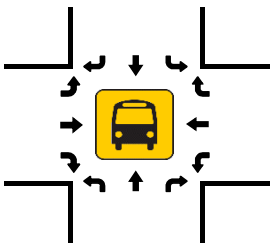
Total Vehicles (AM)



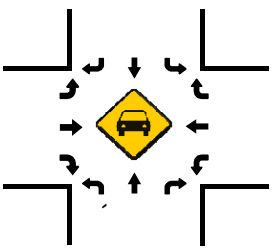
Total Vehicles (NOON)



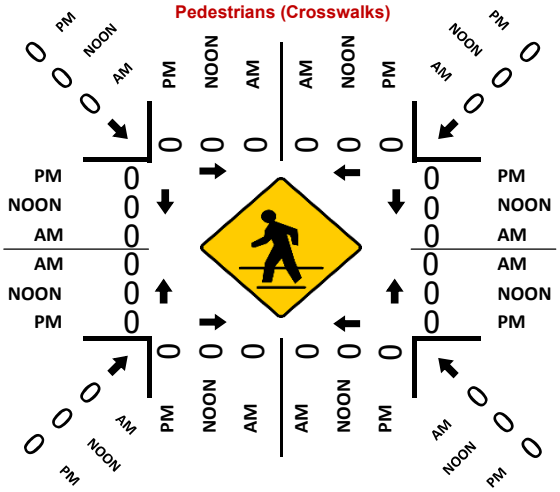
Total Vehicles (NOON)



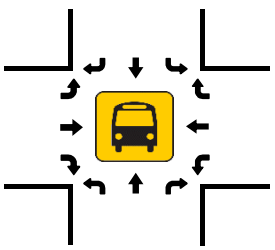
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & I-405 NB Ramps
City: Carson
Control: Signalized

Project ID: 18-05081-015
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				I-405 NB Ramps				I-405 NB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	3	1	0	0	0	0	0	1.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	67	136	0	0	0	144	48	0	0	0	0	0	17	0	77	0	489
7:15 AM	87	170	0	0	0	171	57	0	0	0	0	0	20	0	83	0	588
7:30 AM	100	261	0	0	0	199	76	0	0	0	0	0	14	0	76	0	726
7:45 AM	122	289	0	0	0	210	53	0	0	0	0	0	16	0	102	0	792
8:00 AM	104	308	0	0	0	181	65	0	0	0	0	0	19	0	120	0	797
8:15 AM	88	259	0	0	0	179	63	0	0	0	0	0	17	0	122	0	728
8:30 AM	70	226	0	0	0	184	58	0	0	0	0	0	10	0	96	0	644
8:45 AM	56	231	0	0	0	182	62	0	0	0	0	0	22	0	105	0	658
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	694	1880	0	0	0	1450	482	0	0	0	0	0	135	0	781	0	5422
APPROACH %'s :	26.96%	73.04%	0.00%	0.00%	0.00%	75.05%	24.95%	0.00%					14.74%	0.00%	85.26%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	414	1117	0	0	0	769	257	0	0	0	0	0	66	0	420	0	3043
PEAK HR FACTOR :	0.848	0.907	0.000	0.000	0.000	0.915	0.845	0.000	0.000	0.000	0.000	0.000	0.868	0.000	0.861	0.000	0.955
	0.929				0.933								0.874				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	3	1	0	0	0	0	0	1.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	67	256	0	0	0	357	132	0	0	0	0	0	24	0	103	0	939
4:15 PM	98	218	0	0	0	311	127	0	0	0	0	0	24	0	112	0	890
4:30 PM	68	228	0	0	0	313	131	0	0	0	0	0	21	0	85	0	846
4:45 PM	60	238	0	0	0	298	105	0	0	0	0	0	21	2	86	0	810
5:00 PM	69	261	0	0	0	342	126	0	0	0	0	0	16	0	99	0	913
5:15 PM	77	261	0	0	0	354	120	0	0	0	0	0	27	0	110	0	949
5:30 PM	82	277	0	0	0	344	144	0	0	0	0	0	18	2	82	0	949
5:45 PM	73	281	0	0	0	293	91	0	0	0	0	0	21	0	95	0	854
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	594	2020	0	0	0	2612	976	0	0	0	0	0	172	4	772	0	7150
APPROACH %'s :	22.72%	77.28%	0.00%	0.00%	0.00%	72.80%	27.20%	0.00%					18.14%	0.42%	81.43%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	301	1080	0	0	0	1333	481	0	0	0	0	0	82	2	386	0	3665
PEAK HR FACTOR :	0.918	0.961	0.000	0.000	0.000	0.941	0.835	0.000	0.000	0.000	0.000	0.000	0.759	0.250	0.877	0.000	0.965
	0.962				0.929								0.858				

Prepared by National Data & Surveying Services

Avalon Blvd & I-405 NB Ramps

Peak Hour Turning Movement Count

ID: 18-05081-015
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

Avalon Blvd — SOUTHBOUND

AM	257	769	0	0	1537	AM
NOON	0	0	0	0	0	NOON
PM	481	1333	0	0	1466	PM

I-405 NB Ramps — EASTBOUND

AM	NOON	PM		
671	0	784	⇦	
0	0	0	↶	0
0	0	0	↱	0
0	0	0	→	0
0	0	0	↷	0
AM	NOON	PM		

WESTBOUND — I-405 NB Ramps

PM	NOON	AM		
386	0	420	↰	1
2	0	0	←	0.5
82	0	66	↰	1.5
0	0	0	↶	0
0	0	0	⇨	
PM	NOON	AM		

	1	3	0	0
	0	2	2	0

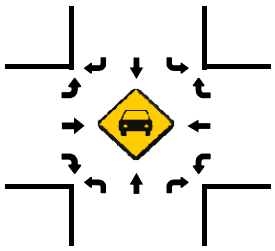
CONTROL: Signalized

TEV	3043 AM	0 NOON	3665 PM
PHF	0.95		0.97

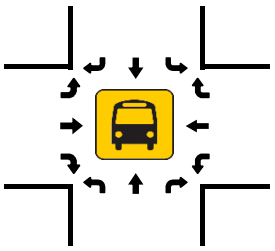
Avalon Blvd — NORTHBOUND

PM	1415	0	301	1080	0	PM
NOON	0	0	0	0	0	NOON
AM	835	0	414	1117	0	AM

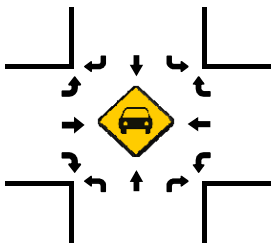
Total Vehicles (AM)



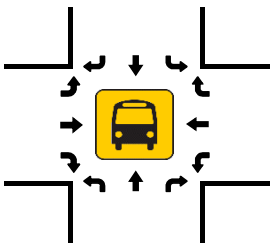
Total Vehicles (AM)



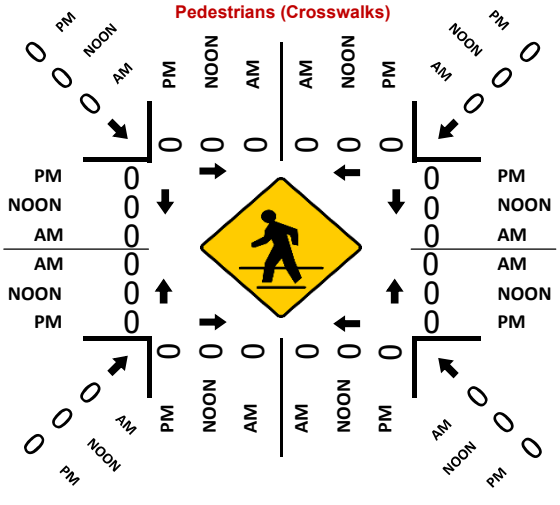
Total Vehicles (NOON)



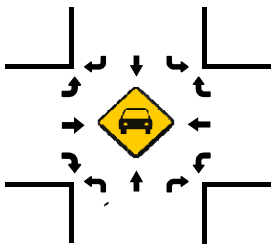
Total Vehicles (NOON)



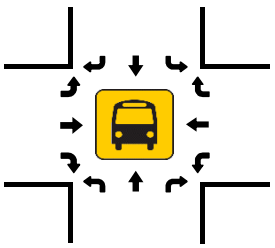
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services Intersection Turning Movement Count

Location: Avalon Blvd & I-405 SB Ramps
City: Carson
Control: Signalized

Project ID: 18-05081-016
Date: 2/1/2018

Total

NS/EW Streets:	Avalon Blvd				Avalon Blvd				I-405 SB Ramps				I-405 SB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	1	0	2	2	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	151	44	0	0	102	63	0	81	1	80	0	0	0	0	0	522
7:15 AM	0	200	17	0	0	138	72	0	80	0	136	0	0	0	0	0	643
7:30 AM	0	270	29	0	0	175	64	0	125	0	136	0	0	0	0	0	799
7:45 AM	0	274	31	0	0	145	59	0	107	6	140	0	0	0	0	0	762
8:00 AM	0	271	23	0	0	112	73	0	130	7	142	0	0	0	0	0	758
8:15 AM	0	196	25	0	0	136	54	0	122	2	90	0	0	0	0	0	625
8:30 AM	0	205	26	0	0	131	48	0	114	0	74	0	0	0	0	0	598
8:45 AM	0	167	28	0	0	136	53	0	98	4	71	0	0	0	0	0	557
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1734	223	0	0	1075	486	0	857	20	869	0	0	0	0	0	5264
APPROACH %'s :	0.00%	88.61%	11.39%	0.00%	0.00%	68.87%	31.13%	0.00%	49.08%	1.15%	49.77%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	1015	100	0	0	570	268	0	442	13	554	0	0	0	0	0	2962
PEAK HR FACTOR :	0.000	0.926	0.806	0.000	0.000	0.814	0.918	0.000	0.850	0.464	0.975	0.000	0.000	0.000	0.000	0.000	0.927
		0.914				0.877				0.904							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	1	0	2	2	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	304	47	0	0	252	103	0	46	32	68	0	0	0	0	0	852
4:15 PM	0	238	34	0	0	211	94	0	58	40	66	0	0	0	0	0	741
4:30 PM	0	267	39	0	0	249	103	0	57	30	77	0	0	0	0	0	822
4:45 PM	0	254	57	0	0	250	83	0	63	48	82	0	0	0	0	0	837
5:00 PM	0	298	47	0	0	253	89	0	50	45	97	0	0	0	0	0	879
5:15 PM	0	290	42	0	0	249	105	0	63	41	83	0	0	0	0	0	873
5:30 PM	0	259	35	0	0	303	87	0	69	35	83	0	0	0	0	0	871
5:45 PM	0	261	40	0	0	252	79	0	68	25	105	0	0	0	0	0	830
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2171	341	0	0	2019	743	0	474	296	661	0	0	0	0	0	6705
APPROACH %'s :	0.00%	86.43%	13.57%	0.00%	0.00%	73.10%	26.90%	0.00%	33.12%	20.68%	46.19%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1101	181	0	0	1055	364	0	245	169	345	0	0	0	0	0	3460
PEAK HR FACTOR :	0.000	0.924	0.794	0.000	0.000	0.870	0.867	0.000	0.888	0.880	0.889	0.000	0.000	0.000	0.000	0.000	0.984
		0.929				0.910				0.983							

Prepared by National Data & Surveying Services

Avalon Blvd & I-405 SB Ramps

Peak Hour Turning Movement Count

ID: 18-05081-016
City: Carson

Day: Thursday
Date: 02/01/2018

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Avalon Blvd

SOUTHBOUND

AM	268	570	0	0	1457	AM
NOON	0	0	0	0	0	NOON
PM	364	1055	0	0	1346	PM

I-405 SB Ramps — EASTBOUND

AM	NOON	PM		
268	0	364	⇦	
0	0	0	↰	0
442	0	245	↱	2
13	0	169	→	2
554	0	345	↴	1
AM	NOON	PM		

CONTROL

Signalized

TEV	2962 AM	0 NOON	3460 PM
PHF	0.93		0.98

WESTBOUND — I-405 SB Ramps

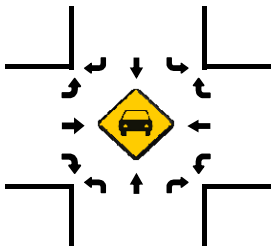
PM	NOON	AM		
0	0	0	↰	0
0	0	0	←	0
0	0	0	↰	0
0	0	0	↰	0
350	0	113	⇨	
PM	NOON	AM		

NORTHBOUND

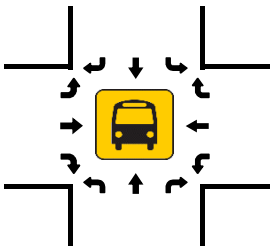
PM	1400	0	0	1101	181	PM
NOON	0	0	0	0	0	NOON
AM	1124	0	0	1015	100	AM

Avalon Blvd

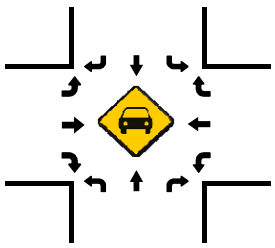
Total Vehicles (AM)



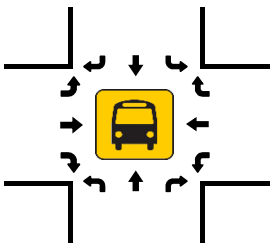
Total Vehicles (AM)



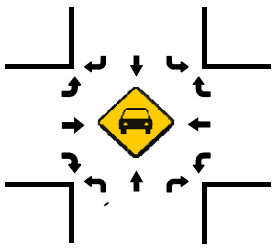
Total Vehicles (NOON)



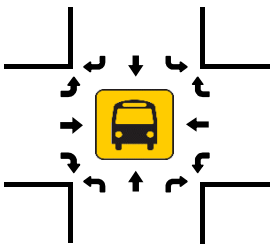
Total Vehicles (NOON)



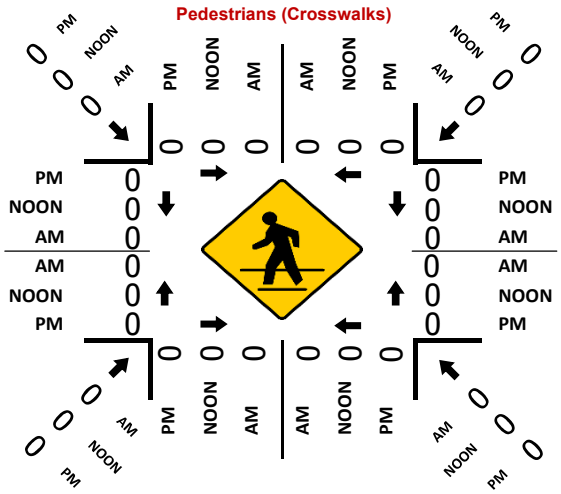
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



Turning Movement Count Report AM

Location ID: 17
North/South: Main St
East/West: WB SR-91 ramps

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	101	15	96	0	79	27	94	0	0	0	0	412
7:15	0	120	10	98	0	90	18	108	0	0	0	0	444
7:30	0	103	20	90	0	126	26	122	0	0	0	0	487
7:45	0	146	15	126	0	127	27	176	0	0	0	0	617
8:00	0	117	20	91	0	118	22	127	0	0	0	0	495
8:15	0	99	19	90	0	98	12	105	1	0	0	0	424
8:30	0	92	19	99	0	79	20	120	1	0	0	0	430
8:45	0	108	19	104	0	88	21	141	0	0	0	0	481
Total Volume:	0	886	137	794	0	805	173	993	2	0	0	0	3790
Approach %	0%	87%	13%	50%	0%	50%	15%	85%	0%	0%	0%	0%	
Peak Hr Begin:	7:15												
PHV	0	486	65	405	0	461	93	533	0	0	0	0	2043
PHF	0.856			0.856			0.771			0.000			0.828

Turning Movement Count Report PM

Location ID: 17
North/South: Main St
East/West: WB SR-91 ramps

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	187	32	78	0	54	26	157	0	0	0	0	534
16:15	0	134	37	60	0	66	27	125	0	0	0	0	449
16:30	0	195	20	74	0	47	25	146	1	0	0	0	508
16:45	0	162	22	115	0	60	22	136	0	0	0	0	517
17:00	0	220	47	79	0	69	30	146	0	0	0	0	591
17:15	0	149	19	58	0	64	21	146	0	0	0	0	457
17:30	0	151	18	51	0	43	13	121	0	0	0	0	397
17:45	0	120	17	59	0	43	14	110	0	0	0	0	363
Total Volume:	0	1318	212	574	0	446	178	1087	1	0	0	0	3816
Approach %	0%	86%	14%	56%	0%	44%	14%	86%	0%	0%	0%	0%	
Peak Hr Begin:	16:30												
PHV	0	726	108	326	0	240	98	574	1	0	0	0	2073
PHF	0.781			0.809			0.956			0.000			0.877

Pedestrian/Bicycle Count Report

Location ID: 17
North/South: Main St
East/West: WB SR-91 ramps

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	1	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	1	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	1	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 18
North/South: Main St
East/West: Albertoni Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	59	89	29	42	80	20	26	69	35	7	53	11	520
7:15	77	91	32	41	116	23	23	66	27	20	85	5	606
7:30	70	121	40	53	108	29	34	93	28	10	66	6	658
7:45	43	87	44	75	110	25	37	116	27	25	80	14	683
8:00	87	117	36	57	85	36	27	85	29	18	71	7	655
8:15	85	82	32	45	77	25	28	63	23	15	76	8	559
8:30	45	85	48	57	85	27	27	66	25	19	77	14	575
8:45	61	95	43	55	84	37	29	89	27	15	67	17	619
Total Volume:	527	767	304	425	745	222	231	647	221	129	575	82	4875
Approach %	33%	48%	19%	31%	54%	16%	21%	59%	20%	16%	73%	10%	
Peak Hr Begin:	7:15												
PHV	277	416	152	226	419	113	121	360	111	73	302	32	2602
PHF	0.880			0.902			0.822			0.855			0.952

Turning Movement Count Report PM

Location ID: 18
North/South: Main St
East/West: Albertoni Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	34	114	85	60	68	28	43	93	19	27	160	23	754
16:15	29	100	58	46	67	25	26	94	27	43	159	22	696
16:30	43	148	60	63	63	29	43	91	25	35	161	12	773
16:45	39	125	46	60	52	23	36	88	17	34	134	15	669
17:00	50	181	74	57	73	29	30	100	34	36	157	19	840
17:15	38	139	40	46	59	26	26	104	27	38	196	12	751
17:30	25	127	48	39	74	22	27	77	23	40	145	13	660
17:45	26	108	20	37	54	32	32	82	31	44	137	6	609
Total Volume:	284	1042	431	408	510	214	263	729	203	297	1249	122	5752
Approach %	16%	59%	25%	36%	45%	19%	22%	61%	17%	18%	75%	7%	
Peak Hr Begin:	16:30												
PHV	170	593	220	226	247	107	135	383	103	143	648	58	3033
PHF	0.806			0.912			0.947			0.863			0.903

Pedestrian/Bicycle Count Report

Location ID: 18
North/South: Main St
East/West: Albertoni Street

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	1	0	0	0	0	0	0	0
8:15	0	1	0	0	0	0	0	1
8:30	0	0	1	0	0	0	0	0
8:45	0	0	1	0	1	0	1	1

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	1	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0
16:30	2	1	0	0	0	0	0	0
16:45	3	1	1	0	0	0	1	0
17:00	1	0	0	0	0	0	0	0
17:15	1	1	0	0	0	0	0	0
17:30	0	0	0	0	1	1	0	1
17:45	0	1	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 19
North/South: Main St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	28	66	8	34	116	40	9	78	10	8	50	14	461
7:15	24	86	12	32	132	50	21	60	13	6	93	17	546
7:30	20	109	16	35	147	60	22	117	13	8	76	19	642
7:45	28	91	16	30	130	47	34	119	12	9	107	14	637
8:00	23	71	18	23	120	27	40	98	12	9	132	18	591
8:15	21	72	14	16	106	26	30	74	10	6	130	20	525
8:30	20	77	17	28	116	23	21	76	12	10	98	12	510
8:45	34	59	13	22	84	23	26	76	12	14	86	15	464
Total Volume:	198	631	114	220	951	296	203	698	94	70	772	129	4376
Approach %	21%	67%	12%	15%	65%	20%	20%	70%	9%	7%	80%	13%	
Peak Hr Begin:	7:15												
PHV	95	357	62	120	529	184	117	394	50	32	408	68	2416
PHF	0.886			0.861			0.850			0.799			0.941

Turning Movement Count Report PM

Location ID: 19
North/South: Main St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	23	130	35	20	128	20	44	71	16	16	218	23	744
16:15	15	113	50	23	106	24	38	72	10	17	258	29	755
16:30	31	130	44	32	143	35	46	74	6	22	248	17	828
16:45	17	135	40	27	122	22	34	77	15	20	243	24	776
17:00	26	173	45	32	168	35	42	98	7	16	250	23	915
17:15	12	130	34	45	171	35	39	64	17	17	222	17	803
17:30	14	138	44	31	148	26	45	79	12	16	222	22	797
17:45	16	107	41	22	103	18	29	63	7	16	210	15	647
Total Volume:	154	1056	333	232	1089	215	317	598	90	140	1871	170	6265
Approach %	10%	68%	22%	15%	71%	14%	32%	60%	9%	6%	86%	8%	
Peak Hr Begin:	16:30												
PHV	86	568	163	136	604	127	161	313	45	75	963	81	3322
PHF	0.837			0.864			0.883			0.968			0.908

Pedestrian/Bicycle Count Report

Location ID: 19
North/South: Main St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	0	1	0	0	0	0	1
7:15	0	0	0	0	1	0	0	0
7:30	0	0	0	0	0	1	0	1
7:45	2	0	2	1	0	0	1	0
8:00	0	0	0	0	0	0	0	1
8:15	0	0	0	0	0	0	0	0
8:30	1	0	1	0	1	1	2	1
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	1	0	0	0	0	0	1
16:15	0	0	0	1	0	0	0	0
16:30	0	0	0	0	0	0	1	0
16:45	1	1	0	0	0	0	0	0
17:00	1	0	0	0	0	0	1	0
17:15	0	0	0	0	0	0	3	0
17:30	1	2	1	1	2	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 20
North/South: Figueroa St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	16	70	7	14	116	20	19	114	38	23	82	25	544
7:15	27	107	6	22	115	13	13	120	39	38	102	23	625
7:30	26	124	6	28	139	14	16	123	33	29	82	26	646
7:45	44	123	12	15	119	17	26	162	27	34	107	35	721
8:00	25	88	13	16	123	20	24	143	37	39	140	40	708
8:15	25	65	12	13	117	9	23	141	54	42	129	50	680
8:30	27	77	13	21	98	14	25	109	39	40	110	52	625
8:45	18	68	7	16	103	7	20	119	45	24	122	31	580
Total Volume:	208	722	76	145	930	114	166	1031	312	269	874	282	5129
Approach %	21%	72%	8%	12%	78%	10%	11%	68%	21%	19%	61%	20%	
Peak Hr Begin:	7:30												
PHV	120	400	43	72	498	60	89	569	151	144	458	151	2755
PHF	0.786			0.870			0.928			0.852			0.955

Turning Movement Count Report PM

Location ID: 20
North/South: Figueroa St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	18	139	23	14	143	11	30	112	33	42	166	25	756
16:15	26	141	19	12	117	15	34	104	19	64	232	37	820
16:30	33	155	14	13	133	10	40	119	32	61	224	26	860
16:45	21	156	9	23	151	18	36	116	29	55	248	30	892
17:00	29	190	17	21	174	19	39	137	21	45	191	29	912
17:15	26	176	21	21	150	20	33	134	35	54	213	36	919
17:30	31	193	20	15	186	10	36	113	20	65	193	19	901
17:45	29	131	15	14	120	5	24	61	29	48	203	21	700
Total Volume:	213	1281	138	133	1174	108	272	896	218	434	1670	223	6760
Approach %	13%	78%	8%	9%	83%	8%	20%	65%	16%	19%	72%	10%	
Peak Hr Begin:	16:45												
PHV	107	715	67	80	661	67	144	500	105	219	845	114	3624
PHF	0.911			0.944			0.927			0.884			0.986

Pedestrian/Bicycle Count Report

Location ID: 20
North/South: Figueroa St
East/West: Victoria Street

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	2	0
7:15	0	0	1	0	3	0	0	0
7:30	0	0	0	0	0	0	2	0
7:45	0	0	0	1	0	0	3	0
8:00	1	0	1	0	2	0	3	0
8:15	0	0	2	0	2	0	2	0
8:30	0	0	3	0	4	1	1	0
8:45	0	0	1	0	1	0	1	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	4	0	1	0	6	0
16:15	0	0	1	0	0	0	4	0
16:30	0	0	0	0	1	1	5	0
16:45	2	0	1	0	1	0	2	0
17:00	1	0	0	0	0	0	1	0
17:15	0	0	0	1	1	0	2	0
17:30	0	0	0	0	1	0	4	0
17:45	0	0	0	0	3	0	11	0

Turning Movement Count Report AM

Location ID: 21
North/South: I-110 NB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	54	118	0	0	0	0	0	139	24	335
7:15	0	0	0	53	138	0	0	0	0	0	156	28	375
7:30	0	0	0	28	158	0	0	0	0	0	144	22	352
7:45	0	0	0	45	159	0	0	0	0	0	176	35	415
8:00	0	0	0	43	127	0	0	0	0	0	209	33	412
8:15	0	0	0	59	147	0	0	0	0	0	237	46	489
8:30	0	0	0	51	122	0	0	0	0	0	188	44	405
8:45	0	0	0	28	126	0	0	0	0	0	195	38	387
Total Volume:	0	0	0	361	1095	0	0	0	0	0	1444	270	3170
Approach %	0%	0%	0%	25%	75%	0%	0%	0%	0%	0%	84%	16%	
Peak Hr Begin:	7:45												
PHV	0	0	0	198	555	0	0	0	0	0	810	158	1721
PHF	0.000			0.914			0.000			0.855			0.880

Turning Movement Count Report PM

Location ID: 21
North/South: I-110 NB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	54	163	0	0	0	0	0	293	113	623
16:15	0	0	0	53	99	0	0	0	0	0	314	105	571
16:30	0	0	0	56	136	0	0	0	0	0	315	102	609
16:45	0	0	0	46	152	0	0	0	0	0	335	92	625
17:00	0	0	0	64	162	0	0	0	0	0	284	108	618
17:15	0	0	0	67	170	0	0	0	0	0	309	131	677
17:30	0	0	0	64	192	0	0	0	0	0	260	104	620
17:45	0	0	0	53	135	0	0	0	0	0	276	100	564
Total Volume:	0	0	0	457	1209	0	0	0	0	0	2386	855	4907
Approach %	0%	0%	0%	27%	73%	0%	0%	0%	0%	0%	74%	26%	
Peak Hr Begin:	16:45												
PHV	0	0	0	241	676	0	0	0	0	0	1188	435	2540
PHF	0.000			0.896			0.000			0.922			0.938

Pedestrian/Bicycle Count Report

Location ID: 21
North/South: I-110 NB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 22
North/South: I-110 SB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	166	0	50	0	116	0	0	0	0	0	97	0	429
7:15	174	0	57	0	159	0	0	0	0	0	150	0	540
7:30	187	0	53	0	150	0	0	0	0	0	130	0	520
7:45	197	0	58	0	138	0	0	0	0	0	163	0	556
8:00	156	0	62	0	158	0	0	0	0	0	202	0	578
8:15	178	0	55	0	134	0	0	0	0	0	209	0	576
8:30	155	0	55	0	113	0	0	0	0	0	185	0	508
8:45	145	0	57	0	134	0	0	0	0	0	144	0	480
Total Volume:	1358	0	447	0	1102	0	0	0	0	0	1280	0	4187
Approach %	75%	0%	25%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	7:30												
PHV	718	0	228	0	580	0	0	0	0	0	704	0	2230
PHF	0.927			0.918			0.000			0.842			0.965

Turning Movement Count Report PM

Location ID: 22
North/South: I-110 SB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	106	0	81	0	140	0	0	0	0	0	361	0	688
16:15	109	0	64	0	114	0	0	0	0	0	335	0	622
16:30	113	0	72	0	150	0	0	0	0	0	363	0	698
16:45	111	0	76	0	135	0	0	0	0	0	328	0	650
17:00	98	0	72	0	184	0	0	0	0	0	377	0	731
17:15	115	0	70	0	170	0	0	0	0	0	326	0	681
17:30	137	0	91	0	181	0	0	0	0	0	292	0	701
17:45	106	0	75	0	127	0	0	0	0	0	301	0	609
Total Volume:	895	0	601	0	1201	0	0	0	0	0	2683	0	5380
Approach %	60%	0%	40%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	16:45												
PHV	461	0	309	0	670	0	0	0	0	0	1323	0	2763
PHF	0.844			0.910			0.000			0.877			0.945

Pedestrian/Bicycle Count Report

Location ID: 22
North/South: I-110 SB ramp
East/West: 190th St

Date: 05/01/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	1	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Central Ave & Victoria St
City: Carson
Control: Signalized

Project ID: 18-05553-005
Date: 8/28/2018

Total

NS/EW Streets:	Central Ave				Central Ave				Victoria St				Victoria St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	2	2	1	0	2	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	22	114	6	0	40	116	74	0	30	38	11	0	1	37	19	0	508
7:15 AM	22	114	1	0	35	139	100	0	25	37	10	0	5	58	27	0	573
7:30 AM	26	120	4	0	52	178	147	0	52	44	27	0	3	51	27	0	731
7:45 AM	31	140	4	1	41	207	153	0	34	61	44	0	4	53	32	0	805
8:00 AM	38	157	8	0	59	180	196	0	58	50	34	0	9	74	26	0	889
8:15 AM	30	113	7	0	42	169	177	0	77	48	18	0	7	99	32	0	819
8:30 AM	24	95	4	1	50	145	143	0	69	40	24	0	2	55	31	0	683
8:45 AM	15	100	5	0	36	116	83	0	43	34	15	1	4	55	24	0	531
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	208	953	39	2	355	1250	1073	0	388	352	183	1	35	482	218	0	5539
APPROACH %'s :	17.30%	79.28%	3.24%	0.17%	13.26%	46.68%	40.07%	0.00%	41.99%	38.10%	19.81%	0.11%	4.76%	65.58%	29.66%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	125	530	23	1	194	734	673	0	221	203	123	0	23	277	117	0	3244
PEAK HR FACTOR :	0.822	0.844	0.719	0.250	0.822	0.886	0.858	0.000	0.718	0.832	0.699	0.000	0.639	0.699	0.914	0.000	0.912
	0.836				0.920				0.956				0.755				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	2	2	1	0	2	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	34	114	14	0	45	137	63	1	148	169	47	0	4	68	64	0	908
4:15 PM	24	152	9	0	50	157	71	0	98	148	37	0	2	34	36	0	818
4:30 PM	38	116	8	1	27	139	74	0	112	131	41	1	4	71	45	0	808
4:45 PM	28	140	9	0	47	174	90	0	107	159	47	0	1	62	37	0	901
5:00 PM	35	138	8	1	42	144	93	1	130	160	49	0	8	108	70	0	987
5:15 PM	22	126	9	0	25	181	98	1	127	178	54	0	6	88	63	0	978
5:30 PM	39	120	9	0	58	149	55	0	140	188	40	0	3	84	41	0	926
5:45 PM	28	160	11	0	27	157	56	0	83	163	42	0	2	71	37	0	837
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	248	1066	77	2	321	1238	600	3	945	1296	357	1	30	586	393	0	7163
APPROACH %'s :	17.80%	76.53%	5.53%	0.14%	14.85%	57.26%	27.75%	0.14%	36.36%	49.87%	13.74%	0.04%	2.97%	58.08%	38.95%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	124	524	35	1	172	648	336	2	504	685	190	0	18	342	211	0	3792
PEAK HR FACTOR :	0.795	0.936	0.972	0.250	0.741	0.895	0.857	0.500	0.900	0.911	0.880	0.000	0.563	0.792	0.754	0.000	0.960
	0.940				0.931				0.937				0.767				

Prepared by National Data & Surveying Services

Central Ave & Victoria St

Peak Hour Turning Movement Count

ID: 18-05553-005
City: Carson

Day: Tuesday
Date: 08/28/2018

PEAK HOURS	
AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS	
AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Central Ave — SOUTHBOUND

AM	673	734	194	0	868	AM
NOON	0	0	0	0	0	NOON
PM	336	648	172	2	1241	PM

EASTBOUND — Victoria St

AM	NOON	PM		
1076	0	803	⇦	
1	0	1	↶	0
221	0	504	↱	2
203	0	685	→	2
123	0	190	↴	0
AM	NOON	PM		

WESTBOUND — Victoria St

PM	NOON	AM		
211	0	117	↰	0
342	0	277	←	2
18	0	23	↰	1
0	0	0	↰	0
892	0	420	⇨	
PM	NOON	AM		

NORTHBOUND — Central Ave

PM	857	1	124	524	35	PM
NOON	0	0	0	0	0	NOON
AM	881	1	125	530	23	AM

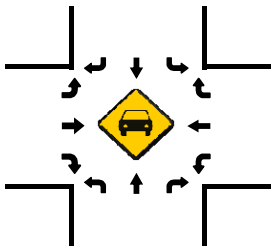
	1	2	2	0
	0	1	2	1

CONTROL

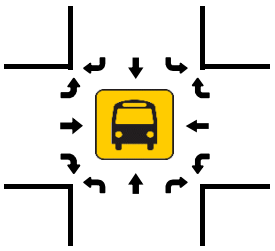
Signalized

TEV	3245	0	3793
	AM	NOON	PM
PHF	0.91		0.96

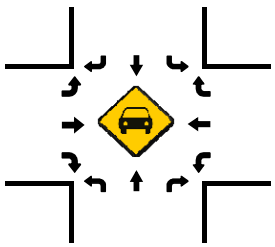
Total Vehicles (AM)



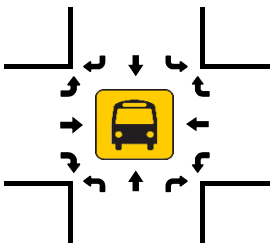
Total Vehicles (AM)



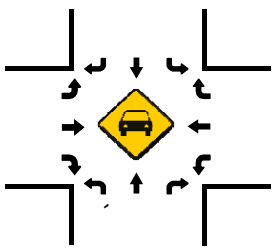
Total Vehicles (NOON)



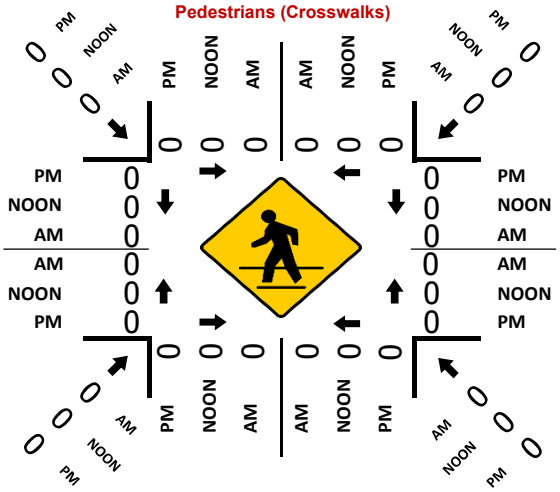
Total Vehicles (NOON)



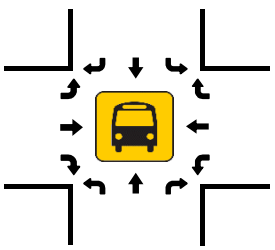
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Hamilton Ave & Del Amo Blvd
City: Torrance
Control: 4-Way Stop

Project ID: 18-05553-001
Date: 8/28/2018

Total

NS/EW Streets:	Hamilton Ave				Hamilton Ave				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	11	21	19	0	8	6	5	0	6	53	21	1	86	135	48	0	420
7:15 AM	12	23	12	0	8	12	0	0	6	51	21	0	108	161	85	0	499
7:30 AM	15	29	10	0	13	25	5	0	4	60	20	0	104	167	75	0	527
7:45 AM	10	42	23	0	11	14	6	0	10	83	20	0	89	204	105	0	617
8:00 AM	21	36	21	0	18	12	3	0	17	69	19	0	75	174	87	1	553
8:15 AM	14	40	22	0	8	9	4	0	14	59	24	0	66	156	60	1	477
8:30 AM	11	43	25	0	19	17	11	0	13	47	21	0	90	157	70	1	525
8:45 AM	17	50	16	0	27	11	7	0	9	55	15	1	75	116	57	0	456
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	111	284	148	0	112	106	41	0	79	477	161	2	693	1270	587	3	4074
APPROACH %'s :	20.44%	52.30%	27.26%	0.00%	43.24%	40.93%	15.83%	0.00%	10.99%	66.34%	22.39%	0.28%	27.14%	49.75%	22.99%	0.12%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	58	130	66	0	50	63	14	0	37	263	80	0	376	706	352	1	2196
PEAK HR FACTOR :	0.690	0.774	0.717	0.000	0.694	0.630	0.583	0.000	0.544	0.792	0.952	0.000	0.870	0.865	0.838	0.250	0.890
	0.814				0.738				0.841				0.901				

NS/EW Streets:	Hamilton Ave				Hamilton Ave				Del Amo Blvd				Del Amo Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	18	18	0	73	59	15	0	5	151	49	0	77	109	23	1	606
4:15 PM	3	15	32	1	63	44	12	0	2	131	39	0	80	103	32	0	557
4:30 PM	4	14	29	0	68	55	15	0	5	135	60	0	63	96	25	0	569
4:45 PM	9	9	24	0	69	70	7	0	3	151	40	0	73	116	23	0	594
5:00 PM	8	6	32	0	78	99	29	0	2	134	51	0	61	104	20	0	624
5:15 PM	2	5	39	1	77	91	11	0	3	153	46	0	70	123	29	0	650
5:30 PM	2	3	36	0	66	70	18	0	1	130	52	0	59	95	18	0	550
5:45 PM	1	5	27	0	73	93	10	0	0	145	48	0	73	103	20	0	598
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	37	75	237	2	567	581	117	0	21	1130	385	0	556	849	190	1	4748
APPROACH %'s :	10.54%	21.37%	67.52%	0.57%	44.82%	45.93%	9.25%	0.00%	1.37%	73.57%	25.07%	0.00%	34.84%	53.20%	11.90%	0.06%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	23	34	124	1	292	315	62	0	13	573	197	0	267	439	97	0	2437
PEAK HR FACTOR :	0.639	0.607	0.795	0.250	0.936	0.795	0.534	0.000	0.650	0.936	0.821	0.000	0.914	0.892	0.836	0.000	0.937
	0.968				0.812				0.969				0.904				

Prepared by National Data & Surveying Services

Hamilton Ave & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05553-001
City: Torrance

Day: Tuesday
Date: 08/28/2018

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
04:30 PM - 05:30 PM	PM	04:00 PM - 06:00 PM

Hamilton Ave — SOUTHBOUND

AM	14	63	50	0	519	AM
NOON	0	0	0	0	0	NOON
PM	62	315	292	0	144	PM
	0	2	1	0		

Del Amo Blvd — EASTBOUND

AM	NOON	PM	
778	0	524	
0	0	0	0
37	0	13	1
263	0	573	2
80	0	197	0
AM	NOON	PM	

Del Amo Blvd — WESTBOUND

	PM	NOON	AM
0	97	0	352
2	439	0	706
1	267	0	376
0	0	0	1
	989	0	380
	PM	NOON	AM

CONTROL

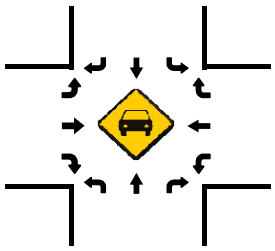
4-Way Stop

	AM	NOON	PM
TEV	2196	0	2437
PHF	0.89		0.94

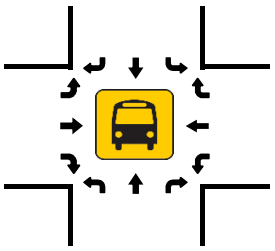
Hamilton Ave — NORTHBOUND

		0	1	2	0	
PM	780	1	23	34	124	PM
NOON	0	0	0	0	0	NOON
AM	519	0	58	130	66	AM

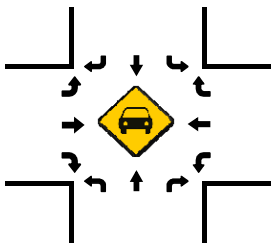
Total Vehicles (AM)



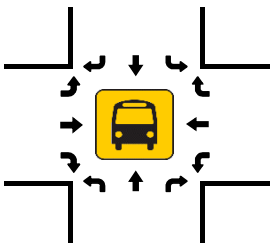
Total Vehicles (AM)



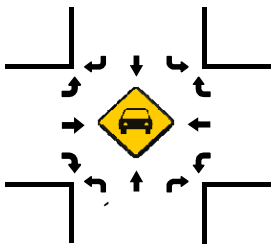
Total Vehicles (NOON)



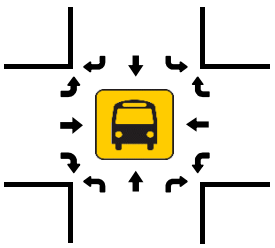
Total Vehicles (NOON)



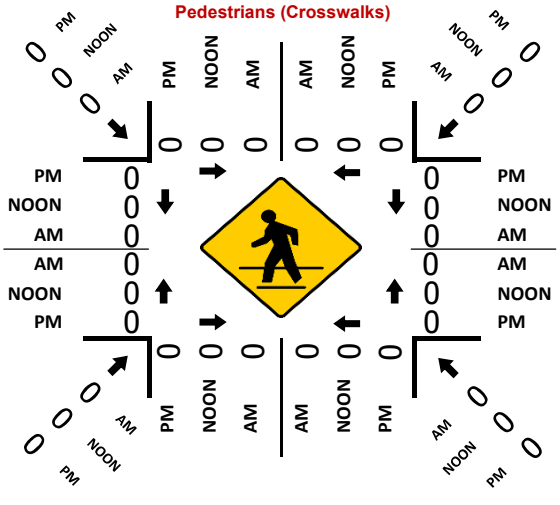
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Hamilton Ave & I-110 SB Ramps
City: Torrance
Control: 3-Way Stop (NB/SB/WB)

Project ID: 18-05553-002
Date: 8/28/2018

Total

NS/EW Streets:	Hamilton Ave				Hamilton Ave				I-110 SB Ramps				I-110 SB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	0	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	11	32	0	92	17	0	0	0	0	0	0	143	0	38	0	333
7:15 AM	0	12	45	0	123	17	0	0	0	0	0	0	158	0	33	0	388
7:30 AM	0	22	55	0	125	20	0	0	0	0	0	0	137	0	36	0	395
7:45 AM	0	26	35	0	106	22	0	0	0	0	0	0	174	0	50	0	413
8:00 AM	0	18	31	0	79	21	0	0	0	0	0	0	186	0	59	0	394
8:15 AM	0	23	23	0	72	28	0	0	0	0	0	0	181	0	52	0	379
8:30 AM	0	14	28	0	96	26	0	0	0	0	0	0	191	0	62	0	417
8:45 AM	0	24	28	0	84	20	0	0	0	0	0	0	206	0	61	0	423
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	150	277	0	777	171	0	0	0	0	0	0	1376	0	391	0	3142
APPROACH %'s :	0.00%	35.13%	64.87%	0.00%	81.96%	18.04%	0.00%	0.00%					77.87%	0.00%	22.13%	0.00%	
PEAK HR :	**08:00 AM - 09:00 AM**																TOTAL
PEAK HR VOL :	0	79	110	0	331	95	0	0	0	0	0	0	764	0	234	0	1613
PEAK HR FACTOR :	0.000	0.823	0.887	0.000	0.862	0.848	0.000	0.000	0.000	0.000	0.000	0.000	0.927	0.000	0.944	0.000	0.953
		0.909				0.873								0.934			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	0	2	0	0	0	0	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	11	80	0	149	29	0	0	0	0	0	0	76	0	33	0	378
4:15 PM	0	20	105	0	153	25	0	0	0	0	0	0	80	0	31	0	414
4:30 PM	0	17	88	0	145	21	0	0	0	0	0	0	87	0	33	0	391
4:45 PM	0	13	133	0	162	17	0	0	0	0	0	0	71	0	27	0	423
5:00 PM	0	17	106	0	165	39	0	0	0	0	0	0	67	0	25	0	419
5:15 PM	0	20	183	0	152	47	0	0	0	0	0	0	69	0	29	0	500
5:30 PM	0	14	118	0	144	41	0	0	0	0	0	0	86	0	24	0	427
5:45 PM	0	10	127	0	173	42	0	0	0	0	0	0	74	0	24	0	450
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	122	940	0	1243	261	0	0	0	0	0	0	610	0	226	0	3402
APPROACH %'s :	0.00%	11.49%	88.51%	0.00%	82.65%	17.35%	0.00%	0.00%					72.97%	0.00%	27.03%	0.00%	
PEAK HR :	**05:00 PM - 06:00 PM**																TOTAL
PEAK HR VOL :	0	61	534	0	634	169	0	0	0	0	0	0	296	0	102	0	1796
PEAK HR FACTOR :	0.000	0.763	0.730	0.000	0.916	0.899	0.000	0.000	0.000	0.000	0.000	0.000	0.860	0.000	0.879	0.000	0.898
		0.733				0.934								0.905			

Prepared by National Data & Surveying Services

Hamilton Ave & I-110 SB Ramps

Peak Hour Turning Movement Count

ID: 18-05553-002
City: Torrance

Day: Tuesday
Date: 08/28/2018

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 06:00 PM

Hamilton Ave — SOUTHBOUND

AM	0	95	331	0	313	AM
NOON	0	0	0	0	0	NOON
PM	0	169	634	0	163	PM

I-110 SB Ramps — EASTBOUND

AM	NOON	PM	
0	0	0	⇦
0	0	0	↶ 0
0	0	0	→ 0
0	0	0	↷ 0
0	0	0	⇩
AM	NOON	PM	

I-110 SB Ramps — WESTBOUND

PM	NOON	AM	
102	0	234	1 ↶
0	0	0	0 ←
296	0	764	2 ↷
0	0	0	0 ↷
1168	0	441	⇨
PM	NOON	AM	

	0	2	0	0	
	0	0	1	1	

CONTROL

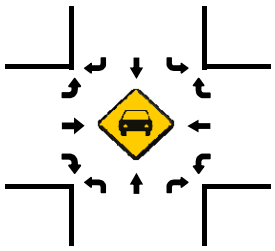
3-Way Stop (NB/SB/WB)

TEV	1613 AM	0 NOON	1796 PM
PHF	0.95		0.90

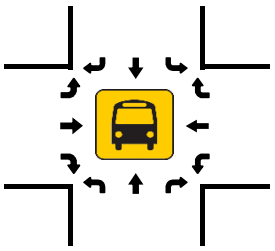
NORTHBOUND — Hamilton Ave

PM	465	0	0	61	534	PM
NOON	0	0	0	0	0	NOON
AM	859	0	0	79	110	AM

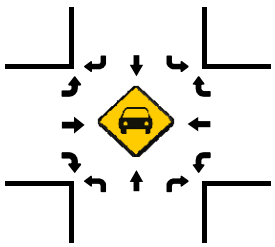
Total Vehicles (AM)



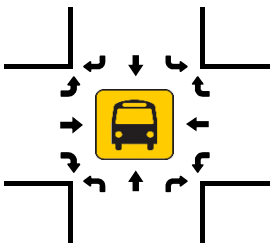
Total Vehicles (AM)



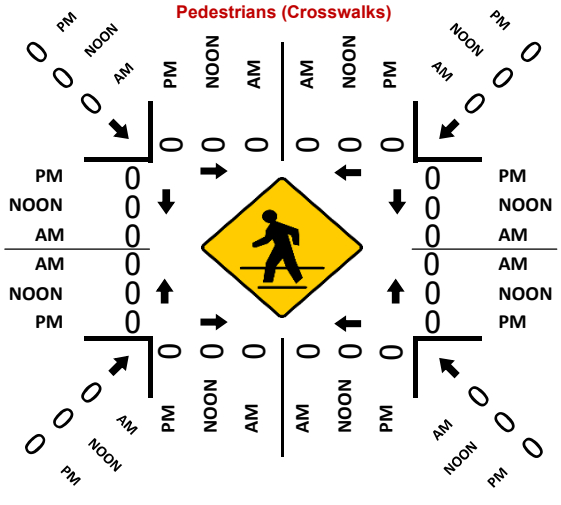
Total Vehicles (NOON)



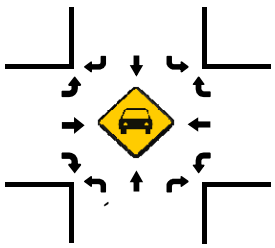
Total Vehicles (NOON)



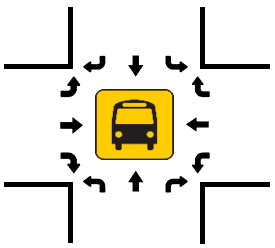
Pedestrians (Crosswalks)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Figueroa St & Del Amo Blvd
City: Carson
Control: Signalized

Project ID: 18-05553-003
Date: 8/28/2018

Total

NS/EW Streets:	Figueroa St				Figueroa St				Del Amo Blvd				Del Amo Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	27	131	52	0	9	41	68	0	14	43	20	2	31	174	29	1	642
7:15 AM	36	124	49	0	5	69	80	0	10	49	16	0	25	248	41	0	752
7:30 AM	32	133	69	0	14	103	96	0	12	60	10	0	23	219	24	0	795
7:45 AM	54	173	94	0	12	80	111	0	16	75	23	0	31	235	26	0	930
8:00 AM	55	153	84	0	10	79	71	1	15	66	25	1	34	194	27	0	815
8:15 AM	50	182	73	2	13	85	71	0	12	59	19	0	17	172	20	0	775
8:30 AM	46	133	63	0	9	45	70	0	16	51	23	0	31	197	18	0	702
8:45 AM	32	111	50	0	8	37	56	1	15	69	23	0	20	153	13	0	588
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	332	1140	534	2	80	539	623	2	110	472	159	3	212	1592	198	1	5999
APPROACH %'s :	16.53%	56.77%	26.59%	0.10%	6.43%	43.33%	50.08%	0.16%	14.78%	63.44%	21.37%	0.40%	10.58%	79.48%	9.89%	0.05%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	191	641	320	2	49	347	349	1	55	260	77	1	105	820	97	0	3315
PEAK HR FACTOR :	0.868	0.880	0.851	0.250	0.875	0.842	0.786	0.250	0.859	0.867	0.770	0.250	0.772	0.872	0.898	0.000	0.891
	0.899				0.876				0.862				0.875				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	12	105	69	0	40	110	45	2	17	186	40	1	29	161	23	0	840
4:15 PM	22	82	68	1	23	107	49	1	18	179	35	0	31	129	21	0	766
4:30 PM	18	116	75	0	32	108	54	1	13	178	28	0	34	123	21	0	801
4:45 PM	23	96	67	3	49	131	56	1	20	199	35	0	30	133	27	0	870
5:00 PM	12	114	90	0	38	178	58	0	19	200	35	0	51	120	19	0	934
5:15 PM	15	113	78	1	43	221	50	0	16	209	31	0	50	150	24	0	1001
5:30 PM	8	84	72	1	53	163	42	1	13	199	31	0	62	130	17	0	876
5:45 PM	4	75	71	0	37	181	57	0	12	220	18	0	45	125	12	0	857
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	114	785	590	6	315	1199	411	6	128	1570	253	1	332	1071	164	0	6945
APPROACH %'s :	7.63%	52.51%	39.46%	0.40%	16.31%	62.09%	21.28%	0.31%	6.56%	80.43%	12.96%	0.05%	21.19%	68.35%	10.47%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	58	407	307	5	183	693	206	2	68	807	132	0	193	533	87	0	3681
PEAK HR FACTOR :	0.630	0.893	0.853	0.417	0.863	0.784	0.888	0.500	0.850	0.965	0.943	0.000	0.778	0.888	0.806	0.000	0.919
	0.899				0.863				0.983				0.907				

Prepared by National Data & Surveying Services

Figueroa St & Del Amo Blvd

Peak Hour Turning Movement Count

ID: 18-05553-003
City: Carson

Day: Tuesday
Date: 08/28/2018

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Figueroa St — SOUTHBOUND

AM	349	347	49	1	794	AM
NOON	0	0	0	0	0	NOON
PM	206	693	183	2	564	PM
	1	2	1	0		

Del Amo Blvd — EASTBOUND

AM	NOON	PM		
1361	0	797	⇦	
1	0	0	↶	0
55	0	68	↱	1
260	0	807	→	2
77	0	132	↷	0
AM	NOON	PM		

CONTROL

Signalized

TEV	3315	0	3681
	AM	NOON	PM
PHF	0.89		0.92

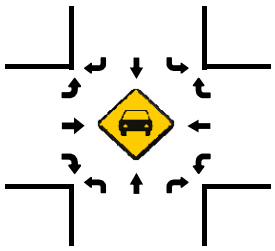
Del Amo Blvd — WESTBOUND

PM	NOON	AM		
87	0	97	↰	1
533	0	820	←	2
193	0	105	↰	1
0	0	0	↶	0
1297	0	629	⇨	
PM	NOON	AM		

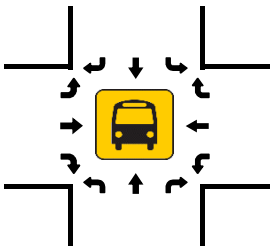
Figueroa St — NORTHBOUND

PM	1023	5	58	407	307	PM
NOON	0	0	0	0	0	NOON
AM	531	2	191	641	320	AM
		0	1	2	1	

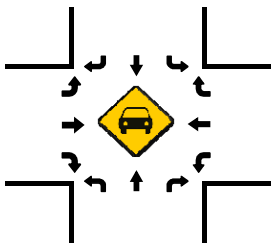
Total Vehicles (AM)



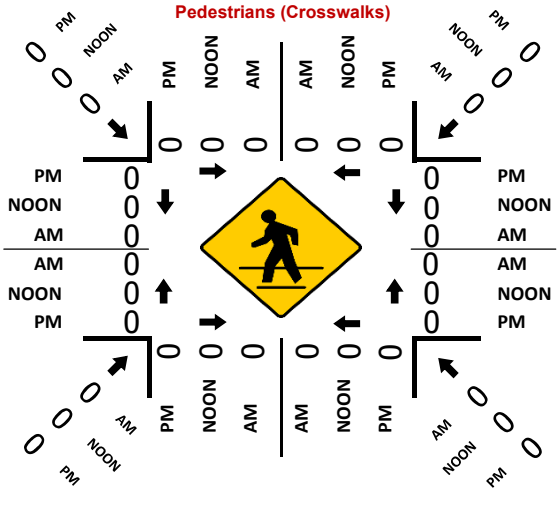
Total Vehicles (AM)



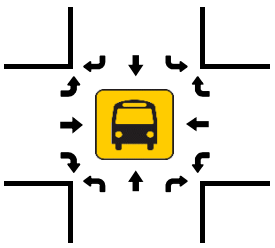
Total Vehicles (NOON)



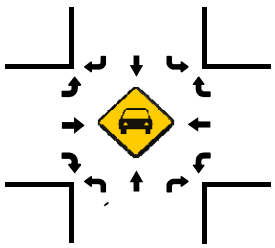
Pedestrians (Crosswalks)



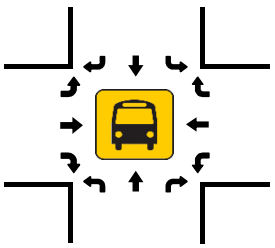
Total Vehicles (NOON)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Figueroa St & I-110 NB Ramps
City: Carson
Control: Signalized

Project ID: 18-05553-004
Date: 8/28/2018

Total

NS/EW Streets:	Figueroa St				Figueroa St				I-110 NB Ramps				I-110 NB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	1.5	0	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	167	107	0	0	0	64	29	0	102	0	44	0	0	0	0	0	513
7:15 AM	154	117	0	0	0	89	24	0	103	0	45	0	0	0	0	0	532
7:30 AM	168	154	0	0	0	111	32	0	78	0	42	0	0	0	0	0	585
7:45 AM	179	157	0	0	0	99	32	0	165	0	68	0	0	0	0	0	700
8:00 AM	163	136	0	0	0	97	35	0	166	0	57	0	0	0	0	0	654
8:15 AM	147	152	0	0	0	104	27	0	140	0	56	0	0	0	0	0	626
8:30 AM	140	145	0	0	0	59	31	0	111	0	62	0	0	0	0	0	548
8:45 AM	155	87	0	0	0	55	32	0	108	0	61	0	0	0	0	0	498
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1273	1055	0	0	0	678	242	0	973	0	435	0	0	0	0	0	4656
APPROACH %'s :	54.68%	45.32%	0.00%	0.00%	0.00%	73.70%	26.30%	0.00%	69.11%	0.00%	30.89%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	657	599	0	0	0	411	126	0	549	0	223	0	0	0	0	0	2565
PEAK HR FACTOR :	0.918	0.954	0.000	0.000	0.000	0.926	0.900	0.000	0.827	0.000	0.820	0.000	0.000	0.000	0.000	0.000	0.916
	0.935				0.939				0.828								

NS/EW Streets:	Figueroa St				Figueroa St				I-110 NB Ramps				I-110 NB Ramps				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	1.5	0	0.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	152	89	0	0	0	131	44	1	91	0	30	0	0	0	0	0	538
4:15 PM	106	71	0	1	0	140	36	0	101	0	26	0	0	0	0	0	481
4:30 PM	155	115	0	0	0	120	49	0	85	0	35	1	0	0	0	0	560
4:45 PM	132	106	0	0	0	164	32	0	95	0	45	0	0	0	0	0	574
5:00 PM	117	115	0	0	0	224	38	0	93	0	31	0	0	0	0	0	618
5:15 PM	126	117	0	0	0	277	37	0	91	0	34	0	0	0	0	0	682
5:30 PM	124	82	0	0	0	223	40	0	78	0	28	0	0	0	0	0	575
5:45 PM	126	70	0	0	0	208	37	0	77	0	28	0	0	0	0	0	546
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1038	765	0	1	0	1487	313	1	711	0	257	1	0	0	0	0	4574
APPROACH %'s :	57.54%	42.41%	0.00%	0.06%	0.00%	82.57%	17.38%	0.06%	73.37%	0.00%	26.52%	0.10%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	499	420	0	0	0	888	147	0	357	0	138	0	0	0	0	0	2449
PEAK HR FACTOR :	0.945	0.897	0.000	0.000	0.000	0.801	0.919	0.000	0.939	0.000	0.767	0.000	0.000	0.000	0.000	0.000	0.898
	0.945				0.824				0.884								

Prepared by National Data & Surveying Services

Figueroa St & I-110 NB Ramps

Peak Hour Turning Movement Count

ID: 18-05553-004
City: Carson

Day: Tuesday
Date: 08/28/2018

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	04:00 PM - 06:00 PM

SOUTHBOUND — Figueroa St

AM	126	411	0	0	1148	AM
NOON	0	0	0	0	0	NOON
PM	147	888	0	0	777	PM

EASTBOUND — I-110 NB Ramps

AM	NOON	PM		
783	0	646	⇦	
0	0	0	↶	0
549	0	357	↱	1.5
0	0	0	→	0
223	0	138	↳	0.5
AM	NOON	PM		

WESTBOUND — I-110 NB Ramps

PM	NOON	AM	
0	0	0	0 ↷
0	0	0	0 ←
0	0	0	0 ↰
0	0	0	0 ↶
0	0	0	⇨
PM	NOON	AM	

NORTHBOUND — Figueroa St

PM	1027	1	499	420	0	PM
NOON	0	0	0	0	0	NOON
AM	634	0	657	599	0	AM

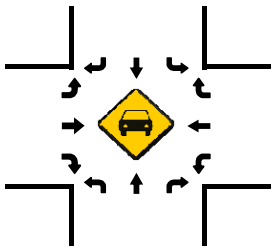
1	2	0	0
0	2	2	0

CONTROL

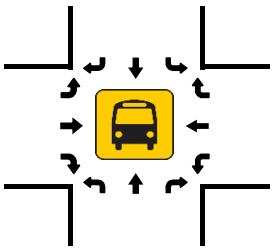
Signalized

TEV	2565	0	2450
	AM	NOON	PM
PHF	0.92		0.90

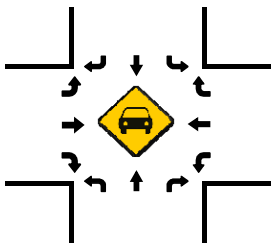
Total Vehicles (AM)



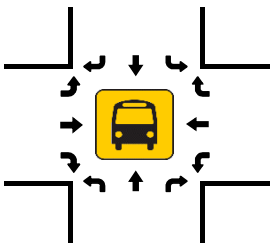
Total Vehicles (AM)



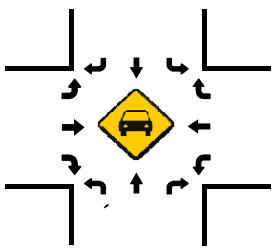
Total Vehicles (NOON)



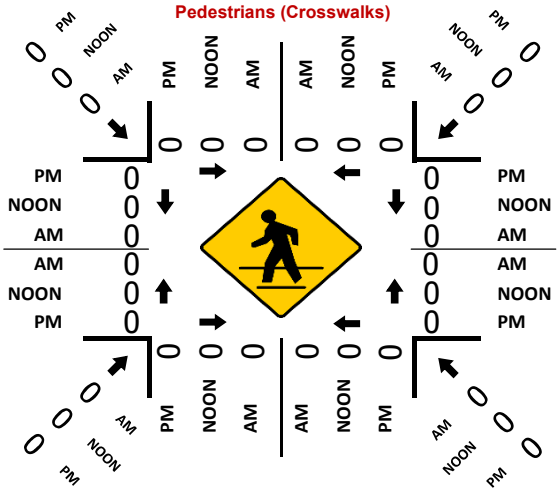
Total Vehicles (NOON)



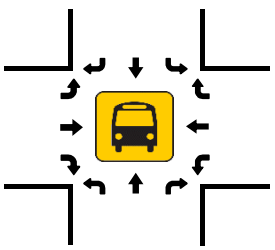
Total Vehicles (PM)



Pedestrians (Crosswalks)



Total Vehicles (PM)



Turning Movement Count Report AM

Location ID: 2
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	46	0	24	13	104	0	0	0	0	0	48	66	301
7:15	36	0	44	23	120	1	0	0	0	0	50	52	326
7:30	37	0	43	16	133	0	0	0	0	0	70	68	367
7:45	70	0	72	18	136	0	0	0	0	0	72	63	431
8:00	63	0	105	30	118	0	0	0	0	0	95	77	488
8:15	56	0	58	24	108	0	0	0	0	0	91	67	404
8:30	51	0	59	15	97	0	0	0	0	0	62	71	355
8:45	64	0	59	9	98	0	0	0	0	0	63	49	342
Total Volume:	423	0	464	148	914	1	0	0	0	0	551	513	3014
Approach %	48%	0%	52%	14%	86%	0%	0%	0%	0%	0%	52%	48%	
Peak Hr Begin:	7:30												
PHV	226	0	278	88	495	0	0	0	0	0	328	275	1690
PHF	0.750			0.946			0.000			0.876			0.866

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 2
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	72	0	97	15	100	0	0	0	0	0	209	49	542
16:15	97	0	118	19	81	0	0	0	0	0	235	43	593
16:30	67	0	98	13	94	1	0	0	0	0	176	65	514
16:45	68	0	113	15	76	0	0	0	0	0	195	57	524
17:00	39	0	102	9	92	0	0	0	0	0	211	73	526
17:15	53	0	109	18	108	0	0	0	0	0	191	58	537
17:30	56	0	123	10	111	0	0	0	0	0	187	57	544
17:45	52	0	88	3	67	0	0	0	0	0	146	48	404
Total Volume:	504	0	848	102	729	1	0	0	0	0	1550	450	4184
Approach %	37%	0%	63%	12%	88%	0%	0%	0%	0%	0%	78%	23%	
Peak Hr Begin:	16:00												
PHV	304	0	426	62	351	1	0	0	0	0	815	214	2173
PHF	0.849			0.900			0.000			0.925			0.916

Pedestrian/Bicycle Count Report

Location ID: 2
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/27/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	0	0	0	0	0	0	0
7:15	1	0	1	0	0	0	0	0
7:30	1	2	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	1	0	0	0	0	0	0	0
16:15	2	1	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	0
16:45	3	1	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	2	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 1
North/South: Main Street
East/West: Broadway Street

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	3	113	0	0	0	0	0	98	44	38	0	0	296
7:15	4	142	0	0	0	0	0	88	53	38	0	0	325
7:30	0	246	0	0	0	0	0	144	57	49	0	0	496
7:45	1	170	0	0	0	0	0	189	84	50	0	0	494
8:00	2	140	0	0	0	0	0	163	59	43	0	0	407
8:15	2	124	0	0	0	0	0	172	69	42	0	0	409
8:30	2	93	0	0	0	0	0	132	48	37	0	0	312
8:45	3	85	0	0	0	0	0	97	41	37	0	0	263
Total Volume:	17	1113	0	0	0	0	0	1083	455	334	0	0	3002
Approach %	2%	98%	0%	0%	0%	0%	0%	70%	30%	100%	0%	0%	
Peak Hr Begin:	7:30												
PHV	5	680	0	0	0	0	0	668	269	184	0	0	1806
PHF	0.696			0.000			0.858			0.920			0.910

Turning Movement Count Report PM

Location ID: 1
North/South: Main Street
East/West: Broadway Street

Date: 09/27/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	169	2	0	0	0	0	149	56	119	0	0	496
16:15	2	145	0	0	0	0	0	147	30	98	0	0	422
16:30	4	187	0	0	0	0	0	151	54	123	0	0	519
16:45	4	150	0	0	0	0	0	186	61	102	0	0	503
17:00	6	187	0	0	0	0	0	171	48	148	0	0	560
17:15	4	159	0	0	0	0	0	170	52	117	0	0	502
17:30	3	161	0	0	0	0	0	166	43	127	0	0	500
17:45	0	143	0	0	0	0	0	128	33	98	0	0	402
Total Volume:	24	1301	2	0	0	0	0	1268	377	932	0	0	3904
Approach %	2%	98%	0%	0%	0%	0%	0%	77%	23%	100%	0%	0%	
Peak Hr Begin:	16:30												
PHV	18	683	0	0	0	0	0	678	215	490	0	0	2084
PHF	0.908			0.000			0.904			0.828			0.930

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: Main Street
East/West: Broadway Street

Date: 09/27/18
City: Carson, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 1
North/South: Main Street
East/West: MLK Jr Street

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	41	8	7	0	17	18	42	0	0	0	0	133
8:15	0	38	16	7	0	12	28	48	0	0	0	0	149
8:30	0	53	17	8	0	8	21	39	0	0	0	0	146
8:45	0	47	9	6	0	18	21	45	0	0	0	0	146
9:00	0	36	13	15	0	19	17	38	0	0	0	0	138
9:15	0	41	11	7	0	16	18	33	0	0	0	0	126
9:30	0	37	14	10	0	13	16	42	0	0	0	0	132
9:45	0	59	15	12	0	14	17	40	0	0	0	0	157
Total Volume:	0	352	103	72	0	117	156	327	0	0	0	0	1127
Approach %	0%	77%	23%	38%	0%	62%	32%	68%	0%	0%	0%	0%	
Peak Hr Begin:	8:15												
PHV	0	174	55	36	0	57	87	170	0	0	0	0	579
PHF	0.818			0.684			0.845			0.000			0.971

Turning Movement Count Report PM

Location ID: 1
North/South: Main Street
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	60	18	25	0	14	21	60	0	0	0	0	198
16:15	0	60	23	19	0	13	27	55	0	0	0	0	197
16:30	0	46	20	13	0	21	23	45	0	0	0	0	168
16:45	0	44	19	17	0	22	28	46	0	0	0	0	176
17:00	0	46	13	17	0	13	26	58	0	0	0	0	173
17:15	0	45	19	12	0	17	23	56	0	0	0	0	172
17:30	0	43	16	9	0	18	18	64	0	0	0	0	168
17:45	0	37	21	14	0	11	20	54	0	0	0	0	157
Total Volume:	0	381	149	126	0	129	186	438	0	0	0	0	1409
Approach %	0%	72%	28%	49%	0%	51%	30%	70%	0%	0%	0%	0%	
Peak Hr Begin:	16:00												
PHV	0	210	80	74	0	70	99	206	0	0	0	0	739
PHF	0.873			0.923			0.930			0.000			0.933

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: Main Street
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	2	0	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 4
North/South: Main Street
East/West: I-405 NB Ramps

Date: 09/22/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	10	117	0	13	11	13	0	71	2	0	0	0	237
11:15	9	91	0	36	22	18	0	62	3	0	0	0	241
11:30	8	99	0	15	35	15	0	74	3	0	0	0	249
11:45	4	101	2	26	11	19	0	83	3	0	0	0	249
12:00	5	104	1	24	24	9	0	77	5	0	0	0	249
12:15	4	95	0	25	15	8	0	69	3	0	0	0	219
12:30	13	108	0	24	18	19	0	73	5	0	0	0	260
12:45	6	89	0	17	18	12	0	68	6	0	0	0	216
Total Volume:	59	804	3	180	154	113	0	577	30	0	0	0	1920
Approach %	7%	93%	0%	40%	34%	25%	0%	95%	5%	0%	0%	0%	
Peak Hr Begin:	11:15												
PHV	26	395	3	101	92	61	0	296	14	0	0	0	988
PHF	0.964			0.836			0.901			0.000			0.992

Pedestrian/Bicycle Count Report

Location ID: 4
North/South: Main Street
East/West: I-405 NB Ramps

Date: 09/22/18
City: Carson, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	1	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 5
North/South: Main Street
East/West: I-405 SB Ramps

Date: 09/22/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	0	91	37	0	0	0	13	64	0	1	20	6	232
11:15	0	82	25	0	0	0	8	58	0	10	17	0	200
11:30	0	100	13	0	0	0	6	74	0	5	14	8	220
11:45	0	97	22	0	0	0	7	76	0	6	18	7	233
12:00	0	87	23	0	0	0	13	85	0	3	19	1	231
12:15	0	72	31	0	0	0	19	72	0	2	26	2	224
12:30	0	110	16	0	0	0	25	66	0	4	14	9	244
12:45	0	83	15	0	0	0	15	72	1	4	19	3	212
Total Volume:	0	722	182	0	0	0	106	567	1	35	147	36	1796
Approach %	0%	80%	20%	0%	0%	0%	16%	84%	0%	16%	67%	17%	
Peak Hr Begin:	11:45												
PHV	0	366	92	0	0	0	64	299	0	15	77	19	932
PHF	0.909			0.000			0.926			0.895			0.955

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Location ID: 5
North/South: Main Street
East/West: I-405 SB Ramps

Date: 09/22/18
City: Carson, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	0	0	0	0	0	0	1
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 6
North/South: Avalon Blvd
East/West: SR-91 WB On-Ramp

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	104	27	40	0	44	34	70	1	0	0	0	320
8:15	0	120	29	40	0	44	33	60	0	0	0	0	326
8:30	0	111	33	45	0	51	41	66	1	0	0	0	348
8:45	0	134	41	56	0	50	45	102	0	0	0	0	428
9:00	0	114	26	51	0	53	43	83	0	0	0	0	370
9:15	0	157	26	48	0	39	54	87	1	0	0	0	412
9:30	0	130	36	54	0	47	50	112	1	0	0	0	430
9:45	0	152	43	41	0	48	58	93	2	0	0	0	437
Total Volume:	0	1022	261	375	0	376	358	673	6	0	0	0	3071
Approach %	0%	80%	20%	50%	0%	50%	35%	65%	1%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	553	131	194	0	187	205	375	4	0	0	0	1649
PHF	0.877			0.916			0.896			0.000			0.943

Turning Movement Count Report PM

Location ID: 6
North/South: Avalon Blvd
East/West: SR-91 WB On-Ramp

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	168	21	55	0	85	37	164	0	0	0	0	530
16:15	0	155	25	49	0	99	55	142	1	0	0	0	526
16:30	0	144	27	54	0	76	58	139	1	0	0	0	499
16:45	0	173	25	63	0	96	51	170	2	0	0	0	580
17:00	0	158	19	57	0	85	69	164	0	0	0	0	552
17:15	0	148	27	34	0	83	63	156	1	0	0	0	512
17:30	0	143	35	50	0	96	55	140	3	0	0	0	522
17:45	0	121	23	52	0	73	64	144	0	0	0	0	477
Total Volume:	0	1210	202	414	0	693	452	1219	8	0	0	0	4198
Approach %	0%	86%	14%	37%	0%	63%	27%	73%	0%	0%	0%	0%	
Peak Hr Begin:	16:45												
PHV	0	622	106	204	0	360	238	630	6	0	0	0	2166
PHF	0.919			0.887			0.938			0.000			0.934

Pedestrian/Bicycle Count Report

Location ID: 6
North/South: Avalon Blvd
East/West: SR-91 WB On-Ramp

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	0	0	0	0
8:15	0	0	1	1	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	1	0	0	0	0
9:00	0	0	2	1	0	0	0	0
9:15	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0
9:45	0	0	0	1	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	1	0	0	0
16:15	0	0	1	1	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	1	0	0	0	0
17:00	0	0	2	1	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	1	0	0	0	0

Turning Movement Count Report AM

Location ID: 11
North/South: Avalon Blvd
East/West: MLK Jr Street

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	6	106	0	0	0	0	0	112	7	6	0	9	246
8:15	9	127	0	0	0	0	0	125	9	11	0	12	293
8:30	7	147	0	0	0	0	0	140	14	10	0	8	326
8:45	8	163	1	0	0	0	0	158	8	8	0	3	349
9:00	14	167	0	0	0	0	0	137	16	14	0	6	354
9:15	8	174	0	0	0	0	0	116	11	19	0	4	332
9:30	11	186	0	0	0	0	0	146	8	8	0	12	371
9:45	7	169	0	0	0	0	0	142	13	17	0	1	349
Total Volume:	70	1239	1	0	0	0	0	1076	86	93	0	55	2620
Approach %	5%	95%	0%	0%	0%	0%	0%	93%	7%	63%	0%	37%	
Peak Hr Begin:	8:45												
PHV	41	690	1	0	0	0	0	557	43	49	0	25	1406
PHF	0.929			0.000			0.904			0.804			0.947

Turning Movement Count Report PM

Location ID: 11
North/South: Avalon Blvd
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	11	192	0	0	0	0	0	212	23	14	0	20	472
16:15	11	220	0	0	0	0	0	218	19	20	0	18	506
16:30	13	211	0	0	0	0	0	251	17	19	0	14	525
16:45	13	211	0	0	0	0	0	202	15	18	0	21	480
17:00	10	218	0	0	0	0	0	222	21	17	0	15	503
17:15	5	200	0	0	0	0	0	238	20	17	0	27	507
17:30	13	179	1	0	0	0	0	229	11	12	0	9	454
17:45	8	204	0	0	0	0	0	203	21	22	0	11	469
Total Volume:	84	1635	1	0	0	0	0	1775	147	139	0	135	3916
Approach %	5%	95%	0%	0%	0%	0%	0%	92%	8%	51%	0%	49%	
Peak Hr Begin:	16:30												
PHV	41	840	0	0	0	0	0	913	73	71	0	77	2015
PHF	0.966			0.000			0.920			0.841			0.960

Pedestrian/Bicycle Count Report

Location ID: 11
North/South: Avalon Blvd
East/West: MLK Jr Street

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	1	0	1	0
8:30	0	0	0	0	0	0	0	1
8:45	0	0	0	0	1	0	0	0
9:00	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	1	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 12
North/South: Avalon Blvd
East/West: Elsmere Drive

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	107	5	5	0	10	4	107	0	0	0	0	238
8:15	0	130	3	3	0	10	3	128	0	0	0	0	277
8:30	0	153	6	5	0	1	6	150	0	0	0	0	321
8:45	0	171	2	7	0	11	6	158	1	0	0	0	356
9:00	0	164	7	8	0	10	7	147	1	0	0	0	344
9:15	0	180	12	7	0	11	4	127	0	0	0	0	341
9:30	0	177	6	5	0	9	7	141	0	0	0	0	345
9:45	0	187	7	8	0	14	15	147	1	0	0	0	379

Total Volume:	0	1269	48	48	0	76	52	1105	3	0	0	0	2601
Approach %	0%	96%	4%	39%	0%	61%	4%	95%	0%	0%	0%	0%	

Peak Hr Begin:	9:00												
PHV	0	708	32	28	0	44	33	562	2	0	0	0	1409
PHF	0.954			0.818			0.916			0.000			0.929

Turning Movement Count Report PM

Location ID: 13
North/South: Avalon Blvd
East/West: Turmont Street

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	216	9	7	0	16	6	220	1	0	0	0	475
16:15	0	217	13	3	0	11	12	227	0	0	0	0	483
16:30	0	221	11	10	0	7	11	250	0	0	0	0	510
16:45	0	220	12	7	0	10	12	204	0	0	0	0	465
17:00	0	219	17	6	0	11	13	246	0	0	0	0	512
17:15	0	188	8	9	0	9	13	255	1	0	0	0	483
17:30	0	205	5	4	0	12	10	222	0	0	0	0	458
17:45	0	217	10	10	0	10	13	220	1	0	0	0	481
Total Volume:	0	1703	85	56	0	86	90	1844	3	0	0	0	3867
Approach %	0%	95%	5%	39%	0%	61%	5%	95%	0%	0%	0%	0%	
Peak Hr Begin:	16:15												
PHV	0	877	53	26	0	39	48	927	0	0	0	0	1970
PHF	0.985			0.956			0.934			0.000			0.962

Pedestrian/Bicycle Count Report

Location ID: 13
North/South: Avalon Blvd
East/West: Turmont Street

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	3	1	1	0	0	0
8:15	0	0	6	1	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	3	1	0	0	0	0
9:00	0	0	0	0	0	0	0	0
9:15	0	0	1	0	0	1	0	0
9:30	0	0	1	0	0	0	0	0
9:45	0	0	2	2	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	2	0	1	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	1	2	1	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0
17:30	0	0	1	0	2	0	0	0
17:45	0	0	0	0	0	1	0	0

Turning Movement Count Report AM

Location ID: 13
North/South: Avalon Blvd
East/West: Turmont Street

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	113	1	6	0	28	13	96	5	0	0	0	262
8:15	0	143	3	7	0	14	33	129	7	0	0	0	336
8:30	0	148	5	10	0	32	24	146	3	0	0	0	368
8:45	0	177	7	16	0	36	26	143	10	0	0	0	415
9:00	0	162	5	6	0	32	33	144	6	0	0	0	388
9:15	0	201	7	6	0	33	24	120	6	0	0	0	397
9:30	0	182	7	3	0	34	30	155	7	0	0	0	418
9:45	0	194	6	9	0	30	41	160	6	0	0	0	446
Total Volume:	0	1320	41	63	0	239	224	1093	50	0	0	0	3030
Approach %	0%	97%	3%	21%	0%	79%	16%	80%	4%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	739	25	24	0	129	128	579	25	0	0	0	1649
PHF	0.918			0.981			0.884			0.000			0.924

Turning Movement Count Report PM

Location ID: 12
North/South: Avalon Blvd
East/West: Elsmere Drive

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	205	11	4	0	32	42	204	3	0	0	0	501
16:15	0	234	9	11	0	25	49	251	6	0	0	0	585
16:30	0	225	5	10	0	28	52	236	4	0	0	0	560
16:45	0	216	15	5	0	28	40	222	7	0	0	0	533
17:00	0	201	16	11	0	16	43	237	8	0	0	0	532
17:15	0	218	8	7	0	18	36	260	1	0	0	0	548
17:30	0	191	11	10	0	18	38	203	10	0	0	0	481
17:45	0	206	15	12	0	22	45	251	6	0	0	0	557
Total Volume:	0	1696	90	70	0	187	345	1864	45	0	0	0	4297
Approach %	0%	95%	5%	27%	0%	73%	15%	83%	2%	0%	0%	0%	
Peak Hr Begin:	16:15												
PHV	0	876	45	37	0	97	184	946	25	0	0	0	2210
PHF	0.948			0.882			0.944			0.000			0.944

Pedestrian/Bicycle Count Report

Location ID: 12
North/South: Avalon Blvd
East/West: Elsmere Drive

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	3	1	0	0	0	0
8:15	0	0	1	2	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	3	1	0	0	0	0
9:00	0	0	4	0	0	0	0	0
9:15	0	0	3	0	0	0	0	0
9:30	0	0	1	0	0	0	0	0
9:45	0	0	4	1	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	1	0	0	0	0	0
16:15	0	0	5	0	0	0	0	0
16:30	0	0	0	2	0	0	0	0
16:45	0	0	2	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	2	0	0	0	0
17:30	0	1	1	0	0	0	0	0
17:45	1	0	0	2	0	0	0	0

Turning Movement Count Report AM

Location ID: 14
North/South: Avalon Blvd
East/West: Del Amo Blvd

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	17	108	28	10	55	61	13	79	8	9	39	15	442
8:15	25	104	38	18	57	54	15	110	12	9	60	39	541
8:30	29	120	42	22	47	57	35	119	18	22	48	35	594
8:45	27	148	43	9	75	53	25	114	13	14	49	38	608
9:00	29	134	45	14	51	55	25	143	25	22	38	33	614
9:15	36	142	55	22	59	62	32	101	23	24	66	16	638
9:30	27	154	52	24	72	58	31	142	22	20	68	30	700
9:45	30	118	63	25	74	57	27	144	20	15	49	29	651
Total Volume:	220	1028	366	144	490	457	203	952	141	135	417	235	4788
Approach %	14%	64%	23%	13%	45%	42%	16%	73%	11%	17%	53%	30%	
Peak Hr Begin:	9:00												
PHV	122	548	215	85	256	232	115	530	90	81	221	108	2603
PHF	0.950			0.918			0.942			0.869			0.930

Turning Movement Count Report PM

Location ID: 14
North/South: Avalon Blvd
East/West: Del Amo Blvd

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	29	148	54	30	70	45	40	165	18	32	73	34	738
16:15	39	172	62	30	60	48	44	205	23	18	74	32	807
16:30	33	158	68	18	58	44	35	231	17	32	96	33	823
16:45	24	159	57	27	71	55	41	178	33	16	57	37	755
17:00	30	174	54	31	66	55	30	203	16	20	84	37	800
17:15	29	148	57	27	69	51	44	223	26	7	55	30	766
17:30	34	136	61	18	77	32	35	210	14	27	72	42	758
17:45	23	138	47	25	45	58	31	196	22	22	74	43	724
Total Volume:	241	1233	460	206	516	388	300	1611	169	174	585	288	6171
Approach %	12%	64%	24%	19%	46%	35%	14%	77%	8%	17%	56%	28%	
Peak Hr Begin:	16:15												
PHV	126	663	241	106	255	202	150	817	89	86	311	139	3185
PHF	0.943			0.920			0.933			0.832			0.967

Pedestrian/Bicycle Count Report

Location ID: 14
North/South: Avalon Blvd
East/West: Del Amo Blvd

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	1	0	4	1	1	0	0	0
8:15	1	0	5	1	1	0	0	0
8:30	2	0	5	0	2	0	1	0
8:45	1	0	4	0	1	0	1	0
9:00	1	0	12	0	3	1	2	0
9:15	3	1	4	1	2	0	2	0
9:30	0	0	4	1	3	0	0	0
9:45	1	0	5	0	0	0	1	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	2	0	7	0	1	0	1	0
16:15	0	0	10	3	1	0	1	0
16:30	0	0	6	1	2	0	2	0
16:45	0	0	4	1	0	0	0	0
17:00	2	0	4	0	1	0	1	0
17:15	1	0	9	2	4	0	0	1
17:30	1	0	9	0	2	0	0	1
17:45	0	0	5	1	2	0	1	0

Turning Movement Count Report AM

Location ID: 15
North/South: Avalon Blvd
East/West: I-405 NB Ramps

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	70	128	0	38	1	24	0	160	56	0	0	0	477
8:15	53	145	0	60	0	15	0	182	93	0	0	0	548
8:30	56	149	0	76	0	17	0	170	86	0	0	0	554
8:45	61	167	0	71	0	20	0	260	87	0	0	0	666
9:00	59	159	0	65	0	15	0	209	74	0	0	0	581
9:15	69	167	0	67	0	18	0	244	73	0	0	0	638
9:30	78	171	0	63	0	17	0	248	79	0	0	0	656
9:45	71	151	0	105	0	20	0	273	63	0	0	0	683
Total Volume:	517	1237	0	545	1	146	0	1746	611	0	0	0	4803
Approach %	29%	71%	0%	79%	0%	21%	0%	74%	26%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	277	648	0	300	0	70	0	974	289	0	0	0	2558
PHF	0.929			0.740			0.940			0.000			0.936

Turning Movement Count Report PM

Location ID: 15
North/South: Avalon Blvd
East/West: I-405 NB Ramps

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	119	260	0	103	0	25	0	293	68	0	0	0	868
16:15	156	260	0	83	0	27	0	298	62	0	0	0	886
16:30	151	226	0	106	0	22	0	309	62	0	0	0	876
16:45	147	250	0	77	0	18	0	289	83	0	0	0	864
17:00	146	234	0	87	0	19	0	294	83	0	0	0	863
17:15	139	256	0	80	1	19	0	278	83	0	0	0	856
17:30	128	205	0	94	0	13	0	275	68	0	0	0	783
17:45	121	203	0	74	0	17	0	231	65	0	0	0	711
Total Volume:	1107	1894	0	704	1	160	0	2267	574	0	0	0	6707
Approach %	37%	63%	0%	81%	0%	18%	0%	80%	20%	0%	0%	0%	
Peak Hr Begin:	16:00												
PHV	573	996	0	369	0	92	0	1189	275	0	0	0	3494
PHF	0.943			0.900			0.984			0.000			0.986

Pedestrian/Bicycle Count Report

Location ID: 15
North/South: Avalon Blvd
East/West: I-405 NB Ramps

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	2	1	1	0	0	0
8:15	0	0	0	0	1	0	0	0
8:30	0	0	1	0	2	0	1	0
8:45	0	0	2	0	1	0	1	0
9:00	0	0	2	0	3	0	2	0
9:15	0	0	2	1	2	0	0	0
9:30	0	0	0	0	3	0	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	2	0	1	0	0	0
16:15	0	0	0	2	1	0	0	0
16:30	0	0	1	1	2	0	2	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	1	0	1	0	0	0
17:15	0	0	2	0	4	0	0	0
17:30	0	0	0	1	2	0	0	0
17:45	0	0	3	0	2	0	0	0

Turning Movement Count Report AM

Location ID: 16
North/South: Avalon Blvd
East/West: I-405 SB Ramps

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	27	101	0	0	0	0	15	132	0	82	1	91	449
8:15	42	136	0	0	0	0	15	156	0	78	0	103	530
8:30	23	123	0	0	0	0	20	132	0	66	1	127	492
8:45	34	133	0	0	0	0	18	194	0	88	0	138	605
9:00	42	139	0	0	0	0	24	190	0	95	1	108	599
9:15	46	150	0	0	0	0	22	210	0	74	1	95	598
9:30	35	135	0	0	0	0	31	193	0	78	2	116	590
9:45	37	147	0	0	0	0	38	230	0	63	1	115	631
Total Volume:	286	1064	0	0	0	0	183	1437	0	624	7	893	4494
Approach %	21%	79%	0%	0%	0%	0%	11%	89%	0%	41%	0%	59%	
Peak Hr Begin:	9:00												
PHV	160	571	0	0	0	0	115	823	0	310	5	434	2418
PHF	0.932			0.000			0.875			0.918			0.958

Turning Movement Count Report PM

Location ID: 16
North/South: Avalon Blvd
East/West: I-405 SB Ramps

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	83	194	0	0	0	0	28	238	0	97	0	127	767
16:15	71	192	0	0	0	0	21	227	0	83	1	122	717
16:30	71	218	0	0	0	0	26	245	0	100	4	147	811
16:45	59	188	0	0	0	0	40	202	0	77	5	136	707
17:00	66	195	0	0	0	0	29	261	0	85	1	143	780
17:15	86	184	0	0	0	0	26	212	0	82	4	138	732
17:30	63	169	0	0	0	0	22	207	0	88	1	121	671
17:45	63	169	0	0	0	0	25	203	0	73	2	124	659
Total Volume:	562	1509	0	0	0	0	217	1795	0	685	18	1058	5844
Approach %	27%	73%	0%	0%	0%	0%	11%	89%	0%	39%	1%	60%	
Peak Hr Begin:	16:30												
PHV	282	785	0	0	0	0	121	920	0	344	14	564	3030
PHF	0.923			0.000			0.897			0.918			0.934

Pedestrian/Bicycle Count Report

Location ID: 16
North/South: Avalon Blvd
East/West: I-405 SB Ramps

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	2	2	1	0	0	0
8:15	0	0	0	0	1	0	0	0
8:30	0	0	0	0	2	0	1	0
8:45	0	0	0	0	1	0	1	1
9:00	0	0	3	1	3	0	2	0
9:15	0	0	3	1	2	0	0	0
9:30	0	0	1	1	3	0	0	0
9:45	0	0	2	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	2	1	1	0	0	0
16:15	0	0	2	2	1	1	0	0
16:30	0	0	1	1	2	0	2	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	0	0	1	0	0	0
17:15	0	0	0	0	4	0	0	0
17:30	0	0	2	1	2	0	0	0
17:45	0	0	2	0	2	0	0	0

Turning Movement Count Report AM

Location ID: 17
North/South: Main Street
East/West: WB SR-91 Ramps

Date: 05/05/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
8:00	0	39	18	27	0	28	13	34	0	0	0	0	159
8:15	0	39	9	34	0	22	21	53	1	0	0	0	179
8:30	0	52	13	33	0	30	22	45	0	0	0	0	195
8:45	0	33	9	27	0	28	28	34	1	0	0	0	160
9:00	0	35	11	26	0	16	28	36	0	0	0	0	152
9:15	0	48	12	33	0	25	34	38	0	0	0	0	190
9:30	0	46	17	26	0	30	31	50	1	0	0	0	201
9:45	0	51	8	31	0	34	28	45	0	0	0	0	197
Total Volume:	0	343	97	237	0	213	205	335	3	0	0	0	1433
Approach %	0%	78%	22%	53%	0%	47%	38%	62%	1%	0%	0%	0%	
Peak Hr Begin:	9:00												
PHV	0	180	48	116	0	105	121	169	1	0	0	0	740
PHF	0.905			0.850			0.887			0.000			0.920

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 17
North/South: Main Street
East/West: WB SR-91 Ramps

Date: 05/05/18
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	54	8	45	0	27	26	29	0	0	0	0	189
16:15	0	57	9	13	0	22	22	47	0	0	0	0	170
16:30	0	42	8	21	0	23	19	59	0	0	0	0	172
16:45	0	36	8	21	0	29	23	37	1	0	0	0	155
17:00	0	44	5	36	0	21	22	60	1	0	0	0	189
17:15	0	44	9	20	0	22	20	51	1	0	0	0	167
17:30	0	43	6	17	0	20	18	44	1	0	0	0	149
17:45	0	34	7	42	0	16	20	31	0	0	0	0	150
Total Volume:	0	354	60	215	0	180	170	358	4	0	0	0	1341
Approach %	0%	86%	14%	54%	0%	46%	32%	67%	1%	0%	0%	0%	
Peak Hr Begin:	16:00												
PHV	0	189	33	100	0	101	90	172	1	0	0	0	686
PHF	0.841			0.698			0.843			0.000			0.907

Pedestrian/Bicycle Count Report

Location ID: 17
North/South: Main Street
East/West: WB SR-91 Ramps

Date: 05/05/18
City: Bakersfield, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
8:00	0	0	0	0	1	0	0	0
8:15	0	0	0	0	1	0	0	0
8:30	0	0	0	0	2	0	1	0
8:45	0	0	0	0	1	0	1	0
9:00	0	0	0	0	3	0	2	0
9:15	0	0	0	0	2	0	0	0
9:30	0	0	0	0	3	0	0	0
9:45	0	0	0	0	0	0	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
16:00	0	0	0	0	1	0	0	0
16:15	0	0	0	0	1	0	0	0
16:30	0	0	0	0	2	0	2	0
16:45	0	0	1	0	1	0	0	0
17:00	0	0	0	0	1	0	0	0
17:15	0	0	0	0	4	0	0	0
17:30	0	0	0	2	2	0	0	0
17:45	0	0	0	0	2	0	0	0

Turning Movement Count Report Midday

Location ID: 1
North/South: I-110 NB On-Ramp
East/West: 190th Street

Date: 10/06/18
City: Gardena, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	0	0	0	36	98	0	0	0	0	0	148	80	362
11:15	0	0	0	38	118	1	0	0	0	0	155	85	397
11:30	0	0	0	44	100	2	0	0	0	0	162	85	393
11:45	0	0	0	47	126	2	0	0	0	0	163	89	427
12:00	0	0	0	44	111	0	0	0	0	0	150	98	403
12:15	0	0	0	48	96	0	0	0	0	0	160	104	408
12:30	0	0	0	31	107	0	0	0	0	0	121	92	351
12:45	0	0	0	40	78	0	0	0	0	0	147	100	365
Total Volume:	0	0	0	328	834	5	0	0	0	0	1206	733	3106
Approach %	0%	0%	0%	28%	71%	0%	0%	0%	0%	0%	62%	38%	
Peak Hr Begin:	11:30												
PHV	0	0	0	183	433	4	0	0	0	0	635	376	1631
PHF	0.000			0.886			0.000			0.957			0.955

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: I-110 NB On-Ramp
East/West: 190th Street

Date: 10/06/18
City: Gardena, CA

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	1	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	3	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 6
North/South: SR-110 SB Off-Ramp
East/West: W 190th Street

Date: 09/29/18
City: Gardena, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	59	0	43	0	101	0	0	0	0	0	178	0	381
11:15	63	0	29	0	85	0	0	0	0	0	211	0	388
11:30	65	0	43	0	102	0	0	0	0	0	174	0	384
11:45	59	0	35	0	122	0	0	0	0	0	180	0	396
12:00	56	0	35	0	137	0	0	0	0	0	210	0	438
12:15	77	0	37	0	121	0	0	0	0	0	235	0	470
12:30	90	0	58	0	116	0	0	0	0	0	220	0	484
12:45	132	0	102	0	98	0	0	0	0	0	235	0	567
Total Volume:	601	0	382	0	882	0	0	0	0	0	1643	0	3508
Approach %	61%	0%	39%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	12:00												
PHV	355	0	232	0	472	0	0	0	0	0	900	0	1959
PHF	0.627			0.861			0.000			0.957			0.864

Pedestrian/Bicycle Count Report

Location ID: 6
North/South: SR-110 SB Off-Ramp
East/West: W 190th Street

Date: 09/29/18
City: Gardena, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	0	0	0	0	0	0	0	0
11:15	0	1	0	0	0	0	0	0
11:30	0	2	0	0	0	0	0	0
11:45	1	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	2	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0

Turning Movement Count Report Mid-Day

Location ID: 1
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/22/18
City: Carson, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
11:00	25	0	58	22	63	0	0	0	0	0	64	92	324
11:15	31	0	63	14	69	0	0	0	0	0	59	39	275
11:30	28	0	48	13	78	0	0	0	0	0	62	58	287
11:45	22	0	49	25	57	0	0	0	0	0	52	57	262
12:00	28	0	59	12	70	0	0	0	0	0	71	72	312
12:15	33	0	64	18	68	1	0	0	0	0	64	67	315
12:30	24	0	38	20	78	0	0	0	0	0	61	74	295
12:45	33	0	47	17	67	0	0	0	0	0	67	55	286
Total Volume:	224	0	426	141	550	1	0	0	0	0	500	514	2356
Approach %	34%	0%	66%	20%	79%	0%	0%	0%	0%	0%	49%	51%	
Peak Hr Begin:	12:00												
PHV	118	0	208	67	283	1	0	0	0	0	263	268	1208
PHF	0.840			0.895			0.000			0.928			0.959

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Location ID: 1
North/South: Albertoni Street
East/West: SR-91 ramps

Date: 09/22/18
City: Carson, CA

	North		*East*		*South*		*West*	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
11:00	1	0	0	0	0	0	0	0
11:15	1	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	5	0	0	0	0	0	0	0
12:00	2	1	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	1	0	0	0	0	0	0	0

Appendix D

Level of Service Worksheets

Existing Conditions 2018
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	455	136	68	540	0	1	0	3	159	0	119
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	455	136	68	540	0	1	0	3	159	0	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	455	136	68	540	0	1	0	3	159	0	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	455	136	68	540	0	1	0	3	159	0	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	455	136	68	540	0	1	0	3	159	0	119
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.53	0.46	1.00	2.00	0.00	0.25	0.00	0.75	1.14	0.00	0.86
Final Sat.:	22	2447	731	1600	3200	0	400	0	1200	1830	0	1370
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.04	0.17	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.567
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	657	0	0	724	70	0	0	0	87	324	232
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	657	0	0	724	70	0	0	0	87	324	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	657	0	0	724	70	0	0	0	87	324	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	657	0	0	724	70	0	0	0	87	324	232
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	657	0	0	724	70	0	0	0	87	324	232
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.82	0.18	0.00	0.00	0.00	0.27	1.01	0.72
Final Sat.:	1600	3200	0	0	2918	282	0	0	0	433	1612	1155
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.05	0.20	0.20
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	599	52	146	723	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	599	52	146	723	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	599	52	146	723	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	599	52	146	723	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	599	52	146	723	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.84	0.16	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2944	256	1600	3200	0	1600	1235	365	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.09	0.23	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	73	549	309	39	515	143	119	579	34	231	918	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	549	309	39	515	143	119	579	34	231	918	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	549	309	39	515	143	119	579	34	231	918	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	549	309	39	515	143	119	579	34	231	918	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	549	309	39	515	143	119	579	34	231	918	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.28	0.72	1.00	1.57	0.43	1.00	2.83	0.17	1.00	2.85	0.15
Final Sat.:	1600	2048	1152	1600	2505	695	1600	4534	266	1600	4557	243
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.02	0.21	0.21	0.07	0.13	0.13	0.14	0.20	0.20
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.622
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	309	610	7	13	538	231	278	18	181	13	54	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	610	7	13	538	231	278	18	181	13	54	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	610	7	13	538	231	278	18	181	13	54	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	610	7	13	538	231	278	18	181	13	54	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	309	610	7	13	538	231	278	18	181	13	54	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.94	0.06	1.00	0.13	0.55	0.32
Final Sat.:	2880	3164	36	1600	3200	1600	1503	97	1600	210	873	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.19	0.19	0.01	0.17	0.14	0.19	0.18	0.11	0.06	0.06	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	912	160	177	1088	0	0	0	0	334	0	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	912	160	177	1088	0	0	0	0	334	0	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	912	160	177	1088	0	0	0	0	334	0	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	912	160	177	1088	0	0	0	0	334	0	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	912	160	177	1088	0	0	0	0	334	0	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.07	xxxx	1.93
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1716	0	3084
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.10	0.06	0.23	0.00	0.00	0.00	0.00	0.19	0.00	0.19
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	715	150	339	656	376	181	127	311	80	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	715	150	339	656	376	181	127	311	80	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	715	150	339	656	376	181	127	311	80	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	715	150	339	656	376	181	127	311	80	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	715	150	339	656	376	181	127	311	80	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3200	1600	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.15	0.09	0.21	0.21	0.24	0.11	0.08	0.10	0.05	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	136	685	201	379	685	78	85	497	81	97	416	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	685	201	379	685	78	85	497	81	97	416	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	685	201	379	685	78	85	497	81	97	416	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	685	201	379	685	78	85	497	81	97	416	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	685	201	379	685	78	85	497	81	97	416	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4309	491	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.13	0.13	0.16	0.16	0.05	0.16	0.05	0.06	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	967	62	37	830	8	57	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	967	62	37	830	8	57	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	967	62	37	830	8	57	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	967	62	37	830	8	57	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	967	62	37	830	8	57	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4754	46	894	0	706	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.04	0.02	0.17	0.17	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.667
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	829	476	289	594	0	0	0	0	247	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	829	476	289	594	0	0	0	0	247	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	829	476	289	594	0	0	0	0	247	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	829	476	289	594	0	0	0	0	247	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	829	476	289	594	0	0	0	0	247	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.30	0.10	0.12	0.00	0.00	0.00	0.00	0.15	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.418
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	117	1204	0	0	727	100	107	0	55	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	1204	0	0	727	100	107	0	55	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	117	1204	0	0	727	100	107	0	55	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	1204	0	0	727	100	107	0	55	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	1204	0	0	727	100	107	0	55	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.64	0.36	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4220	580	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.25	0.00	0.00	0.17	0.17	0.07	0.00	0.03	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.459
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	1 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1268	63	34	755	0	0	0	0	96	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1268	63	34	755	0	0	0	0	96	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1268	63	34	755	0	0	0	0	96	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1268	63	34	755	0	0	0	0	96	0	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1268	63	34	755	0	0	0	0	96	0	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.86	0.14	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4573	227	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.02	0.16	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.520
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	20	1217	114	68	790	0	0	0	0	160	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1217	114	68	790	0	0	0	0	160	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1217	114	68	790	0	0	0	0	160	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1217	114	68	790	0	0	0	0	160	0	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1217	114	68	790	0	0	0	0	160	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.74	0.26	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4389	411	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.04	0.16	0.00	0.00	0.00	0.00	0.10	0.00	0.06
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	145	842	134	186	621	246	257	534	85	184	849	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	842	134	186	621	246	257	534	85	184	849	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	842	134	186	621	246	257	534	85	184	849	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	842	134	186	621	246	257	534	85	184	849	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	842	134	186	621	246	257	534	85	184	849	94
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.15	0.85	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3438	1362	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.08	0.06	0.18	0.18	0.16	0.17	0.05	0.12	0.27	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	414	1117	0	0	769	257	0	0	0	66	0	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	414	1117	0	0	769	257	0	0	0	66	0	420
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	414	1117	0	0	769	0	0	0	0	66	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	414	1117	0	0	769	0	0	0	0	66	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	414	1117	0	0	769	0	0	0	0	66	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.14	0.35	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1015	100	0	570	268	442	13	554	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1015	100	0	570	268	442	13	554	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1015	100	0	570	268	442	13	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1015	100	0	570	268	442	13	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1015	100	0	570	268	442	13	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2913	287	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.18	0.17	0.15	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	533	93	65	486	0	0	0	0	461	0	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	533	93	65	486	0	0	0	0	461	0	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	533	93	65	486	0	0	0	0	461	0	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	533	93	65	486	0	0	0	0	461	0	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	533	93	65	486	0	0	0	0	461	0	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2725	475	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.04	0.15	0.00	0.00	0.00	0.00	0.29	0.00	0.25
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.688
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	111	360	121	152	416	277	32	302	73	113	419	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	360	121	152	416	277	32	302	73	113	419	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	360	121	152	416	277	32	302	73	113	419	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	360	121	152	416	277	32	302	73	113	419	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	360	121	152	416	277	32	302	73	113	419	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.20	0.80	1.00	1.61	0.39	1.00	1.30	0.70
Final Sat.:	1600	2395	805	1600	1921	1279	1600	2577	623	1600	2079	1121
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.10	0.22	0.22	0.02	0.12	0.12	0.07	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	50	394	117	62	357	95	68	408	32	184	529	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	394	117	62	357	95	68	408	32	184	529	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	394	117	62	357	95	68	408	32	184	529	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	394	117	62	357	95	68	408	32	184	529	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	394	117	62	357	95	68	408	32	184	529	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	1.85	0.15	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2527	673	1600	2967	233	1600	2608	592
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.07	0.04	0.14	0.14	0.04	0.14	0.14	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	151	569	89	43	400	120	151	458	144	60	498	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	569	89	43	400	120	151	458	144	60	498	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	569	89	43	400	120	151	458	144	60	498	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	569	89	43	400	120	151	458	144	60	498	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	569	89	43	400	120	151	458	144	60	498	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2796	404
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.03	0.13	0.08	0.09	0.14	0.09	0.04	0.18	0.18
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	158	810	0	0	555	198
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	158	810	0	0	555	198
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	158	810	0	0	555	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	158	810	0	0	555	198
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	158	810	0	0	555	198
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.25	0.00	0.00	0.17	0.12
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	228	0	718	0	704	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	228	0	718	0	704	0	0	580	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	228	0	718	0	704	0	0	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	228	0	718	0	704	0	0	580	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	228	0	718	0	704	0	0	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.45	0.00	0.22	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	126	530	23	194	734	673	221	203	123	23	277	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	530	23	194	734	673	221	203	123	23	277	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	530	23	194	734	673	221	203	123	23	277	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	530	23	194	734	673	221	203	123	23	277	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	530	23	194	734	673	221	203	123	23	277	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.41	0.59
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	1993	1207	1600	2250	950
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.42	0.08	0.10	0.10	0.01	0.12	0.12
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	66	50	63	14	37	263	80	377	706	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	66	50	63	14	37	263	80	377	706	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	66	50	63	14	37	263	80	377	706	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	66	50	63	14	37	263	80	377	706	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	66	50	63	14	37	263	80	377	706	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.33	0.67	1.00	1.64	0.36	1.00	1.53	0.47	1.00	1.33	0.67
Final Sat.:	1600	2122	1078	1600	2618	582	1600	2454	746	1600	2135	1065
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.02	0.02	0.02	0.11	0.11	0.24	0.33	0.33
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0 0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	79	110	331	95	0	0	0	0	764	0	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	331	95	0	0	0	0	764	0	234
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	0	331	95	0	0	0	0	764	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	0	331	95	0	0	0	0	764	0	234
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	0	331	95	0	0	0	0	764	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.53	0.00	0.47
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2450	0	750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.00	0.21	0.06	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.976

Intersection Setup

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	331	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	331	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	83	24	191	59
Total Analysis Volume [veh/h]	79	110	331	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	502	451	483	511	555
Degree of Utilization, x	0.17	0.22	0.73	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	5.93	0.73	12.95	10.60
95th-Percentile Queue Length [ft]	15.54	20.74	148.13	18.14	323.64	264.99
Approach Delay [s/veh]	12.05		25.71		51.35	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	39.97					
Intersection LOS	E					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	193	641	320	50	347	349	56	260	77	105	820	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	320	50	347	349	56	260	77	105	820	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	320	50	347	349	56	260	77	105	820	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	320	50	347	349	56	260	77	105	820	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	320	50	347	349	56	260	77	105	820	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.54	0.46	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2469	731	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.20	0.03	0.11	0.22	0.04	0.11	0.11	0.07	0.26	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0	0 2	0 1	1	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	657	599	0	0	411	126	549	0	223	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	657	599	0	0	411	126	549	0	223	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	657	599	0	0	411	126	549	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	657	599	0	0	411	126	549	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	657	599	0	0	411	126	549	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.42	0.00	0.58	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2276	0	924	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.19	0.00	0.00	0.13	0.08	0.24	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.551
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	278	0	226	275	328	0	0	495	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	226	275	328	0	0	495	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	226	275	328	0	0	495	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	226	275	328	0	0	495	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	226	275	328	0	0	495	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2717	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.14	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	17.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.650

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	269	668	680	5	0	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	668	680	5	0	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	167	170	1	0	46
Total Analysis Volume [veh/h]	269	668	680	5	0	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.65	0.75	0.42	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.83	11.39	7.80	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.39	1.74	0.79	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	34.74	43.50	19.78	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.24		7.75		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	9.81					
Intersection LOS	C					

Existing Conditions 2018
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	518	236	215	658	0	0	0	3	95	0	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	518	236	215	658	0	0	0	3	95	0	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	518	236	215	658	0	0	0	3	95	0	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	518	236	215	658	0	0	0	3	95	0	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	518	236	215	658	0	0	0	3	95	0	77
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.37	0.62	1.00	2.00	0.00	0.00	0.00	1.00	1.10	0.00	0.90
Final Sat.:	8	2193	999	1600	3200	0	0	0	1600	1767	0	1433
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.13	0.21	0.00	0.00	0.00	0.00	0.05	0.00	0.05
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	674	0	0	1235	92	0	0	0	61	121	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	674	0	0	1235	92	0	0	0	61	121	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	674	0	0	1235	92	0	0	0	61	121	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	674	0	0	1235	92	0	0	0	61	121	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	674	0	0	1235	92	0	0	0	61	121	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.86	0.14	0.00	0.00	0.00	0.29	0.71	1.00
Final Sat.:	1600	3200	0	0	2978	222	0	0	0	467	1133	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.21	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.04	0.11	0.15
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.702
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	639	109	272	1025	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	639	109	272	1025	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	639	109	272	1025	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	639	109	272	1025	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	639	109	272	1025	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.71	0.29	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2734	466	1600	3200	0	1600	1389	211	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.23	0.17	0.32	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	457	342	100	821	174	218	1092	102	292	699	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	457	342	100	821	174	218	1092	102	292	699	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	457	342	100	821	174	218	1092	102	292	699	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	457	342	100	821	174	218	1092	102	292	699	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	457	342	100	821	174	218	1092	102	292	699	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.14	0.86	1.00	1.65	0.35	1.00	2.74	0.26	1.00	2.76	0.24
Final Sat.:	1600	1830	1370	1600	2640	560	1600	4390	410	1600	4415	385
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.25	0.06	0.31	0.31	0.14	0.25	0.25	0.18	0.16	0.16
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	186	430	11	38	829	309	379	57	478	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	186	430	11	38	829	309	379	57	478	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	186	430	11	38	829	309	379	57	478	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	430	11	38	829	309	379	57	478	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	430	11	38	829	309	379	57	478	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.87	0.13	1.00	0.12	0.34	0.54
Final Sat.:	2880	3120	80	1600	3200	1600	1391	209	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.02	0.26	0.19	0.27	0.27	0.30	0.03	0.03	0.03
Crit Moves:	****				****				****		****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.570
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1180	217	163	1058	0	0	0	0	354	0	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1180	217	163	1058	0	0	0	0	354	0	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1180	217	163	1058	0	0	0	0	354	0	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1180	217	163	1058	0	0	0	0	354	0	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1180	217	163	1058	0	0	0	0	354	0	449
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.32	0.01	1.67
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2116	0	2684
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.14	0.06	0.22	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.843
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	897	147	261	891	263	287	787	586	103	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	897	147	261	891	263	287	787	586	103	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	897	147	261	891	263	287	787	586	103	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	897	147	261	891	263	287	787	586	103	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	897	147	261	891	263	287	787	586	103	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.32	0.68	1.00	1.72	1.28	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3706	1094	1600	2751	2049	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.09	0.16	0.24	0.24	0.18	0.29	0.29	0.06	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	149	828	227	427	980	85	114	637	142	186	685	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	828	227	427	980	85	114	637	142	186	685	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	828	227	427	980	85	114	637	142	186	685	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	828	227	427	980	85	114	637	142	186	685	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	828	227	427	980	85	114	637	142	186	685	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.76	0.24	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4417	383	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.14	0.15	0.22	0.22	0.07	0.20	0.09	0.12	0.21	0.22
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1080	39	55	1227	33	73	0	30	50	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1080	39	55	1227	33	73	0	30	50	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1080	39	55	1227	33	73	0	30	50	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1080	39	55	1227	33	73	0	30	50	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1080	39	55	1227	33	73	0	30	50	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.92	0.08	0.71	0.00	0.29	1.53	xxxx	1.47
Final Sat.:	1600	4800	1600	1600	4674	126	1134	0	466	2449	0	2351
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.02	0.03	0.26	0.26	0.06	0.00	0.06	0.02	0.00	0.02
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	961	330	351	1033	0	0	0	0	471	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	961	330	351	1033	0	0	0	0	471	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	961	330	351	1033	0	0	0	0	471	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	961	330	351	1033	0	0	0	0	471	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	961	330	351	1033	0	0	0	0	471	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.21	0.12	0.22	0.00	0.00	0.00	0.00	0.29	0.00	0.15
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.592
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	88	1078	0	0	1418	84	198	0	168	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	1078	0	0	1418	84	198	0	168	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	1078	0	0	1418	84	198	0	168	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1078	0	0	1418	84	198	0	168	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	1078	0	0	1418	84	198	0	168	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.83	0.17	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4532	268	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.00	0.00	0.31	0.31	0.12	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	1 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1142	65	59	1526	0	0	0	0	28	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1142	65	59	1526	0	0	0	0	28	0	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1142	65	59	1526	0	0	0	0	28	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1142	65	59	1526	0	0	0	0	28	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1142	65	59	1526	0	0	0	0	28	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.84	0.16	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4542	258	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.04	0.32	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.494
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	36	1135	193	103	1473	0	0	0	0	84	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	1135	193	103	1473	0	0	0	0	84	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	1135	193	103	1473	0	0	0	0	84	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1135	193	103	1473	0	0	0	0	84	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1135	193	103	1473	0	0	0	0	84	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.56	0.44	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4102	698	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.06	0.31	0.00	0.00	0.00	0.00	0.05	0.00	0.04
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.897
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	139	961	179	289	924	301	199	950	210	253	610	146
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	139	961	179	289	924	301	199	950	210	253	610	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	961	179	289	924	301	199	950	210	253	610	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	961	179	289	924	301	199	950	210	253	610	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	961	179	289	924	301	199	950	210	253	610	146
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.26	0.74	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3621	1179	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.11	0.09	0.26	0.26	0.12	0.30	0.13	0.16	0.19	0.09
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	301	1080	0	0	1333	481	0	0	0	82	2	386
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	301	1080	0	0	1333	481	0	0	0	82	2	386
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	301	1080	0	0	1333	0	0	0	0	82	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	1080	0	0	1333	0	0	0	0	82	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	301	1080	0	0	1333	0	0	0	0	82	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.95	0.05	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3124	76	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1101	181	0	1055	364	245	169	345	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1101	181	0	1055	364	245	169	345	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1101	181	0	1055	364	245	169	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1101	181	0	1055	364	245	169	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1101	181	0	1055	364	245	169	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2748	452	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.00	0.33	0.23	0.09	0.05	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	574	98	108	726	0	0	0	0	240	0	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	574	98	108	726	0	0	0	0	240	0	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	574	98	108	726	0	0	0	0	240	0	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	574	98	108	726	0	0	0	0	240	0	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	574	98	108	726	0	0	0	0	240	0	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.71	0.29	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2733	467	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.07	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.20
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	103	383	135	220	593	170	58	648	143	107	247	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	103	383	135	220	593	170	58	648	143	107	247	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	103	383	135	220	593	170	58	648	143	107	247	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	383	135	220	593	170	58	648	143	107	247	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	103	383	135	220	593	170	58	648	143	107	247	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.48	0.52	1.00	1.55	0.45	1.00	1.64	0.36	1.00	1.04	0.96
Final Sat.:	1600	2366	834	1600	2487	713	1600	2621	579	1600	1671	1529
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.16	0.14	0.24	0.24	0.04	0.25	0.25	0.07	0.15	0.15
Crit Moves:			****			****			****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	45	313	161	163	568	86	81	963	75	127	604	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	313	161	163	568	86	81	963	75	127	604	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	313	161	163	568	86	81	963	75	127	604	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	313	161	163	568	86	81	963	75	127	604	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	313	161	163	568	86	81	963	75	127	604	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.74	0.26	1.00	1.86	0.14	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2779	421	1600	2969	231	1600	2612	588
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.10	0.20	0.20	0.05	0.32	0.32	0.08	0.23	0.23
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	105	500	144	67	715	107	114	845	219	67	661	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	105	500	144	67	715	107	114	845	219	67	661	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	500	144	67	715	107	114	845	219	67	661	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	500	144	67	715	107	114	845	219	67	661	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	500	144	67	715	107	114	845	219	67	661	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1600	2484	716	1600	3200	1600	1600	3200	1600	1600	2855	345
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.04	0.22	0.07	0.07	0.26	0.14	0.04	0.23	0.23
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	435	1188	0	0	676	241
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	435	1188	0	0	676	241
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	435	1188	0	0	676	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	435	1188	0	0	676	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	435	1188	0	0	676	241
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.37	0.00	0.00	0.21	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	309	0	461	0	1323	0	0	670	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	309	0	461	0	1323	0	0	670	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	309	0	461	0	1323	0	0	670	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	309	0	461	0	1323	0	0	670	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	309	0	461	0	1323	0	0	670	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.29	0.00	0.41	0.00	0.00	0.14	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	125	524	35	174	648	336	504	685	190	18	342	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	524	35	174	648	336	504	685	190	18	342	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	524	35	174	648	336	504	685	190	18	342	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	524	35	174	648	336	504	685	190	18	342	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	524	35	174	648	336	504	685	190	18	342	211
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.57	0.43	1.00	1.24	0.76
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2505	695	1600	1979	1221
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.02	0.06	0.20	0.21	0.17	0.27	0.27	0.01	0.17	0.17
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	124	292	315	62	13	573	197	267	439	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	124	292	315	62	13	573	197	267	439	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	124	292	315	62	13	573	197	267	439	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	124	292	315	62	13	573	197	267	439	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	124	292	315	62	13	573	197	267	439	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.49	0.51	1.00	1.64	0.36
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2381	819	1600	2621	579
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.08	0.18	0.12	0.12	0.01	0.24	0.24	0.17	0.17	0.17
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0 0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	61	534	634	169	0	0	0	0	296	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	634	169	0	0	0	0	296	0	102
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	0	634	169	0	0	0	0	296	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	0	634	169	0	0	0	0	296	0	102
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	0	634	169	0	0	0	0	296	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2380	0	820
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.00	0.40	0.11	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	81.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.310

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	634	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	634	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	159	42	74	26
Total Analysis Volume [veh/h]	61	534	634	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	634	520	444	481
Degree of Utilization, x	0.12	0.94	1.31	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	27.42	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.73	685.57	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		141.73		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	81.78					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	407	307	185	693	206	68	807	132	193	533	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	307	185	693	206	68	807	132	193	533	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	307	185	693	206	68	807	132	193	533	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	307	185	693	206	68	807	132	193	533	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	307	185	693	206	68	807	132	193	533	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2750	450	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.19	0.12	0.22	0.13	0.04	0.29	0.29	0.12	0.17	0.05
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	499	420	0	0	888	147	357	0	138	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	499	420	0	0	888	147	357	0	138	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	499	420	0	0	888	147	357	0	138	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	420	0	0	888	147	357	0	138	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	499	420	0	0	888	147	357	0	138	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.44	0.00	0.56	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2308	0	892	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.28	0.09	0.15	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	426	0	304	214	815	0	0	352	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	426	0	304	214	815	0	0	352	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	426	0	304	214	815	0	0	352	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	426	0	304	214	815	0	0	352	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	426	0	304	214	815	0	0	352	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2721	479
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.19	0.07	0.25	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	17.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.531

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	215	678	683	18	0	490
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	678	683	18	0	490
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	170	171	5	0	123
Total Analysis Volume [veh/h]	215	678	683	18	0	490
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.53	0.76	0.42	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.07	11.44	7.81	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.05	1.78	0.80	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	26.36	44.51	19.89	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.80		7.61		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.04					
Intersection LOS	C					

Existing Conditions 2018
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.303
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	220	106	86	225	0	0	0	0	75	0	79
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	220	106	86	225	0	0	0	0	75	0	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	220	106	86	225	0	0	0	0	75	0	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	220	106	86	225	0	0	0	0	75	0	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	220	106	86	225	0	0	0	0	75	0	79
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.35	0.65	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	2160	1040	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.05	0.07	0.00	0.00	0.00	0.00	0.05	0.00	0.05
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.321
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	296	0	0	398	26	0	0	0	61	92	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	296	0	0	398	26	0	0	0	61	92	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	296	0	0	398	26	0	0	0	61	92	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	296	0	0	398	26	0	0	0	61	92	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	296	0	0	398	26	0	0	0	61	92	101
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.88	0.12	0.00	0.00	0.00	0.48	0.72	0.80
Final Sat.:	1600	3200	0	0	3004	196	0	0	0	769	1159	1272
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.04	0.08	0.08
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.328
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	299	64	92	366	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	299	64	92	366	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	299	64	92	366	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	299	64	92	366	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	299	64	92	366	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2636	564	1600	3200	0	1600	1339	261	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.11	0.06	0.11	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	681	255	113	666	0	0	0	0	385	0	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	681	255	113	666	0	0	0	0	385	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	681	255	113	666	0	0	0	0	385	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	681	255	113	666	0	0	0	0	385	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	681	255	113	666	0	0	0	0	385	0	218
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.92	0.00	1.08
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3065	0	1735
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.16	0.04	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	78	977	0	0	899	44	82	0	76	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	977	0	0	899	44	82	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	977	0	0	899	44	82	0	76	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	977	0	0	899	44	82	0	76	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	977	0	0	899	44	82	0	76	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.86	0.14	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4576	224	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.00	0.00	0.20	0.20	0.05	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.365
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	1 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	983	44	49	930	0	0	0	0	32	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	983	44	49	930	0	0	0	0	32	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	983	44	49	930	0	0	0	0	32	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	983	44	49	930	0	0	0	0	32	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	983	44	49	930	0	0	0	0	32	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.87	0.13	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4594	206	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.03	0.19	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.436
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	51	984	149	39	933	0	0	0	0	121	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	984	149	39	933	0	0	0	0	121	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	984	149	39	933	0	0	0	0	121	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	984	149	39	933	0	0	0	0	121	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	984	149	39	933	0	0	0	0	121	0	47
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.61	0.39	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4169	631	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.24	0.02	0.19	0.00	0.00	0.00	0.00	0.08	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	160	775	160	251	691	151	197	351	114	239	305	141
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	775	160	251	691	151	197	351	114	239	305	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	775	160	251	691	151	197	351	114	239	305	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	775	160	251	691	151	197	351	114	239	305	141
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	775	160	251	691	151	197	351	114	239	305	141
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.46	0.54	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3939	861	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.10	0.08	0.18	0.18	0.12	0.11	0.07	0.15	0.10	0.09
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	294	1272	0	0	1066	613	0	0	0	98	0	395
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	294	1272	0	0	1066	613	0	0	0	98	0	395
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	294	1272	0	0	1066	0	0	0	0	98	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	1272	0	0	1066	0	0	0	0	98	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	294	1272	0	0	1066	0	0	0	0	98	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.40	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	984	129	0	840	302	603	15	368	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	984	129	0	840	302	603	15	368	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	984	129	0	840	302	603	15	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	984	129	0	840	302	603	15	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	984	129	0	840	302	603	15	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2829	371	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.26	0.19	0.21	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.277
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	185	96	35	202	0	0	0	0	108	0	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	185	96	35	202	0	0	0	0	108	0	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	185	96	35	202	0	0	0	0	108	0	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	185	96	35	202	0	0	0	0	108	0	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	185	96	35	202	0	0	0	0	108	0	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.32	0.68	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2107	1093	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.02	0.06	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	47	163	104	159	228	73	36	303	46	51	176	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	163	104	159	228	73	36	303	46	51	176	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	163	104	159	228	73	36	303	46	51	176	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	163	104	159	228	73	36	303	46	51	176	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	163	104	159	228	73	36	303	46	51	176	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.22	0.78	1.00	1.51	0.49	1.00	1.74	0.26	1.00	1.08	0.92
Final Sat.:	1600	1954	1246	1600	2424	776	1600	2778	422	1600	1733	1467
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.08	0.10	0.09	0.09	0.02	0.11	0.11	0.03	0.10	0.10
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	376	635	0	4	433	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	376	635	0	4	433	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	376	635	0	4	433	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	376	635	0	4	433	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	376	635	0	4	433	183
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.20	0.00	0.00	0.14	0.11
Crit Moves:							****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	232	0	355	0	900	0	0	472	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	232	0	355	0	900	0	0	472	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	232	0	355	0	900	0	0	472	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	232	0	355	0	900	0	0	472	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	232	0	355	0	900	0	0	472	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.22	0.00	0.28	0.00	0.00	0.10	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	208	0	118	268	263	0	0	284	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	208	0	118	268	263	0	0	284	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	208	0	118	268	263	0	0	284	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	208	0	118	268	263	0	0	284	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	208	0	118	268	263	0	0	284	67
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.62	0.38
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2589	611
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.07	0.09	0.08	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Existing with Project Conditions 2018
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	455	166	113	540	0	1	0	3	182	0	154
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	455	166	113	540	0	1	0	3	182	0	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	455	166	113	540	0	1	0	3	182	0	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	455	166	113	540	0	1	0	3	182	0	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	455	166	113	540	0	1	0	3	182	0	154
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.46	0.53	1.00	2.00	0.00	0.25	0.00	0.75	1.08	0.00	0.92
Final Sat.:	20	2330	850	1600	3200	0	400	0	1200	1733	0	1467
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.07	0.17	0.00	0.00	0.00	0.00	0.11	0.00	0.10
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	679	0	0	747	70	0	0	0	87	324	239
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	679	0	0	747	70	0	0	0	87	324	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	679	0	0	747	70	0	0	0	87	324	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	679	0	0	747	70	0	0	0	87	324	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	679	0	0	747	70	0	0	0	87	324	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.27	1.00	0.73
Final Sat.:	1600	3200	0	0	2926	274	0	0	0	428	1595	1177
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.05	0.20	0.20
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	621	52	152	740	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	621	52	152	740	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	621	52	152	740	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	621	52	152	740	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	621	52	152	740	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.85	0.15	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2953	247	1600	3200	0	1600	1235	365	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.23	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	73	561	309	39	524	151	130	579	34	231	918	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	561	309	39	524	151	130	579	34	231	918	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	561	309	39	524	151	130	579	34	231	918	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	561	309	39	524	151	130	579	34	231	918	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	561	309	39	524	151	130	579	34	231	918	49
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.29	0.71	1.00	1.55	0.45	1.00	2.83	0.17	1.00	2.85	0.15
Final Sat.:	1600	2063	1137	1600	2484	716	1600	4534	266	1600	4557	243
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.02	0.21	0.21	0.08	0.13	0.13	0.14	0.20	0.20
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	309	618	7	13	545	234	281	18	181	13	54	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	309	618	7	13	545	234	281	18	181	13	54	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	618	7	13	545	234	281	18	181	13	54	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	618	7	13	545	234	281	18	181	13	54	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	309	618	7	13	545	234	281	18	181	13	54	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.94	0.06	1.00	0.13	0.55	0.32
Final Sat.:	2880	3164	36	1600	3200	1600	1504	96	1600	210	873	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.20	0.01	0.17	0.15	0.19	0.19	0.11	0.06	0.06	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	915	165	177	1092	0	0	0	0	337	0	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	915	165	177	1092	0	0	0	0	337	0	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	915	165	177	1092	0	0	0	0	337	0	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	915	165	177	1092	0	0	0	0	337	0	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	915	165	177	1092	0	0	0	0	337	0	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.08	xxxx	1.92
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1726	0	3074
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.10	0.06	0.23	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	724	153	339	663	376	181	127	311	86	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	724	153	339	663	376	181	127	311	86	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	724	153	339	663	376	181	127	311	86	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	724	153	339	663	376	181	127	311	86	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	724	153	339	663	376	181	127	311	86	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3200	1600	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.15	0.10	0.21	0.21	0.24	0.11	0.08	0.10	0.05	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	136	696	204	379	699	78	85	497	81	101	416	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	696	204	379	699	78	85	497	81	101	416	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	696	204	379	699	78	85	497	81	101	416	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	696	204	379	699	78	85	497	81	101	416	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	696	204	379	699	78	85	497	81	101	416	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.70	0.30	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4318	482	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.13	0.13	0.16	0.16	0.05	0.16	0.05	0.06	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	982	62	37	848	8	57	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	982	62	37	848	8	57	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	982	62	37	848	8	57	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	982	62	37	848	8	57	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	982	62	37	848	8	57	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4755	45	894	0	706	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.04	0.02	0.18	0.18	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	844	479	289	612	0	0	0	0	250	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	844	479	289	612	0	0	0	0	250	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	844	479	289	612	0	0	0	0	250	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	844	479	289	612	0	0	0	0	250	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	844	479	289	612	0	0	0	0	250	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.30	0.10	0.13	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	128	1205	0	0	727	121	123	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	1205	0	0	727	121	123	0	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	1205	0	0	727	121	123	0	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	1205	0	0	727	121	123	0	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	1205	0	0	727	121	123	0	63	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.57	0.43	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4115	685	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.00	0.00	0.18	0.18	0.08	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.461
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1278	63	35	762	0	1	0	1	96	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1278	63	35	762	0	1	0	1	96	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1278	63	35	762	0	1	0	1	96	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1278	63	35	762	0	1	0	1	96	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1278	63	35	762	0	1	0	1	96	0	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4574	226	1600	4800	0	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.02	0.16	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	20	1227	114	68	798	0	0	0	0	160	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1227	114	68	798	0	0	0	0	160	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1227	114	68	798	0	0	0	0	160	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1227	114	68	798	0	0	0	0	160	0	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1227	114	68	798	0	0	0	0	160	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.74	0.26	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1440	4392	408	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.04	0.17	0.00	0.00	0.00	0.00	0.10	0.00	0.06
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	145	847	134	189	625	246	257	534	85	184	849	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	847	134	189	625	246	257	534	85	184	849	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	145	847	134	189	625	246	257	534	85	184	849	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	847	134	189	625	246	257	534	85	184	849	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	847	134	189	625	246	257	534	85	184	849	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.15	0.85	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3444	1356	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.08	0.06	0.18	0.18	0.16	0.17	0.05	0.12	0.27	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	414	1119	0	0	772	259	0	0	0	66	0	423
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	414	1119	0	0	772	259	0	0	0	66	0	423
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	414	1119	0	0	772	0	0	0	0	66	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	414	1119	0	0	772	0	0	0	0	66	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	414	1119	0	0	772	0	0	0	0	66	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.14	0.35	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1015	100	0	570	271	444	13	554	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1015	100	0	570	271	444	13	554	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1015	100	0	570	271	444	13	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1015	100	0	570	271	444	13	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1015	100	0	570	271	444	13	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2913	287	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.18	0.17	0.15	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	540	104	65	494	0	0	0	0	464	0	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	540	104	65	494	0	0	0	0	464	0	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	540	104	65	494	0	0	0	0	464	0	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	540	104	65	494	0	0	0	0	464	0	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	540	104	65	494	0	0	0	0	464	0	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2683	517	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.04	0.15	0.00	0.00	0.00	0.00	0.29	0.00	0.25
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	114	377	123	152	428	277	32	302	76	127	419	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	377	123	152	428	277	32	302	76	127	419	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	377	123	152	428	277	32	302	76	127	419	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	377	123	152	428	277	32	302	76	127	419	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	377	123	152	428	277	32	302	76	127	419	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.21	0.79	1.00	1.60	0.40	1.00	1.30	0.70
Final Sat.:	1600	2413	787	1600	1943	1257	1600	2557	643	1600	2079	1121
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.10	0.22	0.22	0.02	0.12	0.12	0.08	0.20	0.20
Crit Moves:		****				****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	62	416	117	62	386	95	68	408	48	184	529	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	416	117	62	386	95	68	408	48	184	529	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	416	117	62	386	95	68	408	48	184	529	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	416	117	62	386	95	68	408	48	184	529	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	416	117	62	386	95	68	408	48	184	529	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.79	0.21	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2568	632	1600	2863	337	1600	2608	592
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.07	0.04	0.15	0.15	0.04	0.14	0.14	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	151	569	89	43	400	120	151	474	144	60	511	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	569	89	43	400	120	151	474	144	60	511	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	569	89	43	400	120	151	474	144	60	511	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	569	89	43	400	120	151	474	144	60	511	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	569	89	43	400	120	151	474	144	60	511	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2805	395
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.03	0.13	0.08	0.09	0.15	0.09	0.04	0.18	0.18
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.358
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	158	826	0	0	563	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	158	826	0	0	563	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	158	826	0	0	563	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	158	826	0	0	563	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	158	826	0	0	563	202
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.26	0.00	0.00	0.18	0.13
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	233	0	718	0	715	0	0	588	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	233	0	718	0	715	0	0	588	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	233	0	718	0	715	0	0	588	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	233	0	718	0	715	0	0	588	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	233	0	718	0	715	0	0	588	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.45	0.00	0.22	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	126	530	23	194	734	673	221	206	123	23	281	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	530	23	194	734	673	221	206	123	23	281	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	530	23	194	734	673	221	206	123	23	281	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	530	23	194	734	673	221	206	123	23	281	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	530	23	194	734	673	221	206	123	23	281	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.41	0.59
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2004	1196	1600	2259	941
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.42	0.08	0.10	0.10	0.01	0.12	0.12
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.547
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	66	50	63	14	37	266	80	383	709	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	66	50	63	14	37	266	80	383	709	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	66	50	63	14	37	266	80	383	709	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	66	50	63	14	37	266	80	383	709	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	66	50	63	14	37	266	80	383	709	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.33	0.67	1.00	1.64	0.36	1.00	1.54	0.46	1.00	1.34	0.66
Final Sat.:	1600	2122	1078	1600	2618	582	1600	2460	740	1600	2138	1062
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.02	0.02	0.02	0.11	0.11	0.24	0.33	0.33
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 0	1	0 1	1 0	0	0 0	0 0	0 0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	79	110	337	95	0	0	0	0	764	0	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	337	95	0	0	0	0	764	0	234
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	0	337	95	0	0	0	0	764	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	0	337	95	0	0	0	0	764	0	234
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	0	337	95	0	0	0	0	764	0	234
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.53	0.00	0.47
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2450	0	750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.00	0.21	0.06	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.979

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	337	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	337	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	84	24	191	59
Total Analysis Volume [veh/h]	79	110	337	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	454	500	451	482	509	554
Degree of Utilization, x	0.17	0.22	0.75	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	6.19	0.73	13.03	10.68
95th-Percentile Queue Length [ft]	15.58	20.80	154.66	18.15	325.81	267.03
Approach Delay [s/veh]	12.07		26.63		52.00	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	40.57					
Intersection LOS	E					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	193	641	327	50	347	349	56	263	77	105	828	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	327	50	347	349	56	263	77	105	828	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	327	50	347	349	56	263	77	105	828	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	327	50	347	349	56	263	77	105	828	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	327	50	347	349	56	263	77	105	828	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.55	0.45	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2475	725	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.20	0.03	0.11	0.22	0.04	0.11	0.11	0.07	0.26	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	657	599	0	0	411	126	556	0	223	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	657	599	0	0	411	126	556	0	223	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	657	599	0	0	411	126	556	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	657	599	0	0	411	126	556	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	657	599	0	0	411	126	556	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.43	0.00	0.57	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2284	0	916	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.19	0.00	0.00	0.13	0.08	0.24	0.00	0.24	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.552
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	278	0	240	277	328	0	0	495	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	240	277	328	0	0	495	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	240	277	328	0	0	495	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	240	277	328	0	0	495	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	240	277	328	0	0	495	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2717	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.15	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.671

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	269	698	703	5	0	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	698	703	5	0	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	175	176	1	0	46
Total Analysis Volume [veh/h]	269	698	703	5	0	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.67	0.78	0.43	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.44	11.56	7.83	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.45	1.86	0.82	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	36.26	46.59	20.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.47		7.77		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	9.97					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.291
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	57	0	25	0	0	0	0	183	74	32	248	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	0	25	0	0	0	0	183	74	32	248	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	0	25	0	0	0	0	183	74	32	248	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	0	25	0	0	0	0	183	74	32	248	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	0	25	0	0	0	0	183	74	32	248	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.02	0.00	0.00	0.00	0.00	0.11	0.05	0.02	0.16	0.00
Crit Moves:	****						****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.378
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1335	0	0	835	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1335	0	0	835	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1335	0	0	835	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1335	0	0	835	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1335	0	0	835	0	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	0	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****								

Existing with Project Conditions 2018
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.617
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	518	275	286	658	0	0	0	3	136	0	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	518	275	286	658	0	0	0	3	136	0	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	518	275	286	658	0	0	0	3	136	0	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	518	275	286	658	0	0	0	3	136	0	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	518	275	286	658	0	0	0	3	136	0	144
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.30	0.69	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	8	2085	1107	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.18	0.21	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	703	0	0	1276	92	0	0	0	61	121	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	703	0	0	1276	92	0	0	0	61	121	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	703	0	0	1276	92	0	0	0	61	121	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	703	0	0	1276	92	0	0	0	61	121	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	703	0	0	1276	92	0	0	0	61	121	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.29	0.71	1.00
Final Sat.:	1600	3200	0	0	2985	215	0	0	0	456	1144	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.04	0.11	0.15
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	668	109	282	1055	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	668	109	282	1055	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	668	109	282	1055	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	668	109	282	1055	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	668	109	282	1055	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.72	0.28	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2751	449	1600	3200	0	1600	1389	211	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.18	0.33	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.876
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	472	345	100	837	189	232	1102	102	293	704	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	472	345	100	837	189	232	1102	102	293	704	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	472	345	100	837	189	232	1102	102	293	704	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	472	345	100	837	189	232	1102	102	293	704	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	472	345	100	837	189	232	1102	102	293	704	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.16	0.84	1.00	1.63	0.37	1.00	2.75	0.25	1.00	2.76	0.24
Final Sat.:	1600	1849	1351	1600	2611	589	1600	4393	407	1600	4417	383
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.06	0.32	0.32	0.15	0.25	0.25	0.18	0.16	0.16
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	186	441	11	38	841	315	386	57	478	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	186	441	11	38	841	315	386	57	478	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	186	441	11	38	841	315	386	57	478	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	441	11	38	841	315	386	57	478	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	441	11	38	841	315	386	57	478	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.87	0.13	1.00	0.12	0.34	0.54
Final Sat.:	2880	3122	78	1600	3200	1600	1394	206	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.02	0.26	0.20	0.28	0.28	0.30	0.03	0.03	0.03
Crit Moves:	****				****				****		****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.573
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1190	232	163	1072	0	0	0	0	358	0	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1190	232	163	1072	0	0	0	0	358	0	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1190	232	163	1072	0	0	0	0	358	0	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1190	232	163	1072	0	0	0	0	358	0	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1190	232	163	1072	0	0	0	0	358	0	449
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.33	0.00	1.67
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2129	0	2671
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.15	0.06	0.22	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	922	154	261	909	263	287	787	586	132	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	922	154	261	909	263	287	787	586	132	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	922	154	261	909	263	287	787	586	132	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	922	154	261	909	263	287	787	586	132	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	922	154	261	909	263	287	787	586	132	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.33	0.67	1.00	1.72	1.28	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3723	1077	1600	2751	2049	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.10	0.16	0.24	0.24	0.18	0.29	0.29	0.08	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	156	860	235	427	1027	85	114	637	158	196	685	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	860	235	427	1027	85	114	637	158	196	685	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	860	235	427	1027	85	114	637	158	196	685	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	860	235	427	1027	85	114	637	158	196	685	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	860	235	427	1027	85	114	637	158	196	685	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.77	0.23	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4433	367	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.18	0.15	0.15	0.23	0.23	0.07	0.20	0.10	0.12	0.21	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.484
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1127	39	55	1300	33	73	0	30	50	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1127	39	55	1300	33	73	0	30	50	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1127	39	55	1300	33	73	0	30	50	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1127	39	55	1300	33	73	0	30	50	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1127	39	55	1300	33	73	0	30	50	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	0.71	0.00	0.29	1.53	xxxx	1.47
Final Sat.:	1600	4800	1600	1600	4681	119	1134	0	466	2449	0	2351
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.02	0.03	0.28	0.28	0.06	0.00	0.06	0.02	0.00	0.02
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.731
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1008	336	351	1106	0	0	0	0	478	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1008	336	351	1106	0	0	0	0	478	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1008	336	351	1106	0	0	0	0	478	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1008	336	351	1106	0	0	0	0	478	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1008	336	351	1106	0	0	0	0	478	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.12	0.23	0.00	0.00	0.00	0.00	0.30	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.639
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	108	1102	0	0	1470	112	227	0	195	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	1102	0	0	1470	112	227	0	195	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	1102	0	0	1470	112	227	0	195	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1102	0	0	1470	112	227	0	195	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1102	0	0	1470	112	227	0	195	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.79	0.21	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4460	340	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.00	0.00	0.33	0.33	0.14	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.500
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	38	1155	65	60	1539	64	30	0	18	28	1	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1155	65	60	1539	64	30	0	18	28	1	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1155	65	60	1539	64	30	0	18	28	1	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	1155	65	60	1539	64	30	0	18	28	1	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	1155	65	60	1539	64	30	0	18	28	1	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	2.88	0.12	1.00	0.00	1.00	1.00	0.03	0.97
Final Sat.:	1600	4544	256	1600	4608	192	1600	0	1600	1600	43	1557
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.25	0.04	0.33	0.33	0.02	0.00	0.01	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	36	1186	193	103	1504	0	0	0	0	84	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	1186	193	103	1504	0	0	0	0	84	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	1186	193	103	1504	0	0	0	0	84	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1186	193	103	1504	0	0	0	0	84	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	1186	193	103	1504	0	0	0	0	84	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.58	0.42	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1440	4128	672	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.06	0.31	0.00	0.00	0.00	0.00	0.05	0.00	0.04
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.902
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	101	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	139	989	179	297	941	307	213	950	210	253	610	156
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	139	989	179	297	941	307	213	950	210	253	610	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	139	989	179	297	941	307	213	950	210	253	610	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	989	179	297	941	307	213	950	210	253	610	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	139	989	179	297	941	307	213	950	210	253	610	156
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.26	0.74	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3619	1181	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.11	0.09	0.26	0.26	0.13	0.30	0.13	0.16	0.19	0.10
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	301	1093	0	0	1346	485	0	0	0	82	2	401
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	301	1093	0	0	1346	485	0	0	0	82	2	401
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	301	1093	0	0	1346	0	0	0	0	82	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	1093	0	0	1346	0	0	0	0	82	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	301	1093	0	0	1346	0	0	0	0	82	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.95	0.05	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3124	76	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1109	181	0	1059	373	250	169	345	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1109	181	0	1059	373	250	169	345	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1109	181	0	1059	373	250	169	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1109	181	0	1059	373	250	169	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1109	181	0	1059	373	250	169	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2751	449	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.00	0.33	0.23	0.09	0.05	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.592
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	588	119	108	741	0	0	0	0	244	0	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	588	119	108	741	0	0	0	0	244	0	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	588	119	108	741	0	0	0	0	244	0	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	588	119	108	741	0	0	0	0	244	0	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	588	119	108	741	0	0	0	0	244	0	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2661	539	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.07	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.20
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.849
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	109	418	139	220	613	170	58	648	150	130	247	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	418	139	220	613	170	58	648	150	130	247	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	418	139	220	613	170	58	648	150	130	247	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	418	139	220	613	170	58	648	150	130	247	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	418	139	220	613	170	58	648	150	130	247	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.57	0.43	1.00	1.62	0.38	1.00	1.04	0.96
Final Sat.:	1600	2401	799	1600	2505	695	1600	2598	602	1600	1671	1529
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.14	0.24	0.24	0.04	0.25	0.25	0.08	0.15	0.15
Crit Moves:			****			****			****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.777
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	67	358	161	163	618	86	81	979	96	127	611	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	358	161	163	618	86	81	979	96	127	611	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	358	161	163	618	86	81	979	96	127	611	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	358	161	163	618	86	81	979	96	127	611	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	358	161	163	618	86	81	979	96	127	611	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.76	0.24	1.00	1.82	0.18	1.00	1.64	0.36
Final Sat.:	1600	3200	1600	1600	2809	391	1600	2914	286	1600	2617	583
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.10	0.10	0.22	0.22	0.05	0.34	0.34	0.08	0.23	0.23
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.707
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	105	500	144	67	715	107	114	882	219	67	690	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	105	500	144	67	715	107	114	882	219	67	690	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	500	144	67	715	107	114	882	219	67	690	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	500	144	67	715	107	114	882	219	67	690	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	500	144	67	715	107	114	882	219	67	690	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2484	716	1600	3200	1600	1600	3200	1600	1600	2868	332
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.04	0.22	0.07	0.07	0.28	0.14	0.04	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.483
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	435	1225	0	0	695	251
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	435	1225	0	0	695	251
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	435	1225	0	0	695	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	435	1225	0	0	695	251
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	435	1225	0	0	695	251
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.38	0.00	0.00	0.22	0.16
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.809
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	321	0	461	0	1347	0	0	689	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	321	0	461	0	1347	0	0	689	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	321	0	461	0	1347	0	0	689	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	321	0	461	0	1347	0	0	689	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	321	0	461	0	1347	0	0	689	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.29	0.00	0.42	0.00	0.00	0.14	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	125	524	35	174	648	336	504	693	190	18	352	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	125	524	35	174	648	336	504	693	190	18	352	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	125	524	35	174	648	336	504	693	190	18	352	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	524	35	174	648	336	504	693	190	18	352	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	125	524	35	174	648	336	504	693	190	18	352	211
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.57	0.43	1.00	1.25	0.75
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2511	689	1600	2001	1199
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.02	0.06	0.20	0.21	0.17	0.28	0.28	0.01	0.18	0.18
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	124	292	315	62	13	580	197	281	445	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	124	292	315	62	13	580	197	281	445	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	124	292	315	62	13	580	197	281	445	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	124	292	315	62	13	580	197	281	445	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	124	292	315	62	13	580	197	281	445	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.49	0.51	1.00	1.64	0.36
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2389	811	1600	2627	573
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.08	0.18	0.12	0.12	0.01	0.24	0.24	0.18	0.17	0.17
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0	1 1	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	61	534	648	169	0	0	0	0	296	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	648	169	0	0	0	0	296	0	102
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	0	648	169	0	0	0	0	296	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	0	648	169	0	0	0	0	296	0	102
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	0	648	169	0	0	0	0	296	0	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2380	0	820
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.00	0.41	0.11	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:		****		****								****

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	86.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.339

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	648	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	648	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	162	42	74	26
Total Analysis Volume [veh/h]	61	534	648	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	648	520	444	481
Degree of Utilization, x	0.12	0.94	1.34	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	28.91	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.74	722.74	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		151.69		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	86.74					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	407	324	185	693	206	68	814	132	193	552	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	324	185	693	206	68	814	132	193	552	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	324	185	693	206	68	814	132	193	552	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	324	185	693	206	68	814	132	193	552	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	324	185	693	206	68	814	132	193	552	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2753	447	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.20	0.12	0.22	0.13	0.04	0.30	0.30	0.12	0.17	0.05
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	499	420	0	0	888	147	374	0	138	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	499	420	0	0	888	147	374	0	138	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	499	420	0	0	888	147	374	0	138	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	499	420	0	0	888	147	374	0	138	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	499	420	0	0	888	147	374	0	138	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2338	0	863	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.28	0.09	0.16	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	426	0	327	218	815	0	0	352	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	426	0	327	218	815	0	0	352	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	426	0	327	218	815	0	0	352	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	426	0	327	218	815	0	0	352	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	426	0	327	218	815	0	0	352	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2721	479
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.20	0.08	0.25	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.561

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	215	717	724	18	0	490
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	717	724	18	0	490
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	179	181	5	0	123
Total Analysis Volume [veh/h]	215	717	724	18	0	490
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.56	0.80	0.45	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.02	11.67	7.85	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.13	1.94	0.86	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	28.32	48.62	21.41	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.14		7.66		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.29					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	102	0	44	0	0	0	0	421	98	42	178	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	0	44	0	0	0	0	421	98	42	178	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	0	44	0	0	0	0	421	98	42	178	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	0	44	0	0	0	0	421	98	42	178	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	0	44	0	0	0	0	421	98	42	178	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.03	0.00	0.00	0.00	0.00	0.26	0.06	0.03	0.11	0.00
Crit Moves:	****							****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.433
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1252	0	0	1600	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1252	0	0	1600	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1252	0	0	1600	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1252	0	0	1600	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1252	0	0	1600	0	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	0	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****							

Existing with Project Conditions 2018
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	220	178	194	225	0	0	0	0	130	0	162
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	220	178	194	225	0	0	0	0	130	0	162
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	220	178	194	225	0	0	0	0	130	0	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	220	178	194	225	0	0	0	0	130	0	162
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	220	178	194	225	0	0	0	0	130	0	162
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.11	0.89	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1769	1431	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.12	0.07	0.00	0.00	0.00	0.00	0.08	0.00	0.10
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.347
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	336	0	0	453	26	0	0	0	61	92	132
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	336	0	0	453	26	0	0	0	61	92	132
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	336	0	0	453	26	0	0	0	61	92	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	336	0	0	453	26	0	0	0	61	92	132
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	336	0	0	453	26	0	0	0	61	92	132
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.00	0.00	0.00	0.43	0.64	0.93
Final Sat.:	1600	3200	0	0	3026	174	0	0	0	685	1033	1482
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.04	0.09	0.09
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	339	64	116	397	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	339	64	116	397	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	339	64	116	397	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	339	64	116	397	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	339	64	116	397	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.68	0.32	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2692	508	1600	3200	0	1600	1339	261	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.07	0.12	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	695	290	113	684	0	0	0	0	394	0	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	695	290	113	684	0	0	0	0	394	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	695	290	113	684	0	0	0	0	394	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	695	290	113	684	0	0	0	0	394	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	695	290	113	684	0	0	0	0	394	0	218
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.93	0.00	1.07
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3090	0	1710
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.18	0.04	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	78	1060	0	0	1007	44	82	0	76	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	1060	0	0	1007	44	82	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	1060	0	0	1007	44	82	0	76	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	1060	0	0	1007	44	82	0	76	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	1060	0	0	1007	44	82	0	76	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.87	0.13	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4599	201	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.00	0.00	0.22	0.22	0.05	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	162	983	44	49	930	108	83	0	124	32	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	983	44	49	930	108	83	0	124	32	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	983	44	49	930	108	83	0	124	32	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	983	44	49	930	108	83	0	124	32	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	983	44	49	930	108	83	0	124	32	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.69	0.31	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4594	206	1600	4301	499	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.21	0.03	0.22	0.22	0.05	0.00	0.08	0.02	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	3 0	0	0 0	0 0	0 0	1 0	0 1	0
Volume Module:												
Base Vol:	51	1146	149	39	1057	0	0	0	0	121	0	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	51	1146	149	39	1057	0	0	0	0	121	0	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	1146	149	39	1057	0	0	0	0	121	0	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	1146	149	39	1057	0	0	0	0	121	0	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	1146	149	39	1057	0	0	0	0	121	0	47
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.65	0.35	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1440	4248	552	1600	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.27	0.02	0.22	0.00	0.00	0.00	0.00	0.08	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	160	883	160	258	774	186	242	351	114	239	305	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	883	160	258	774	186	242	351	114	239	305	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	883	160	258	774	186	242	351	114	239	305	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	883	160	258	774	186	242	351	114	239	305	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	883	160	258	774	186	242	351	114	239	305	150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.42	0.58	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	3200	3870	930	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.18	0.10	0.08	0.20	0.20	0.15	0.11	0.07	0.15	0.10	0.09
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	294	1321	0	0	1121	641	0	0	0	98	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	294	1321	0	0	1121	641	0	0	0	98	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	294	1321	0	0	1121	0	0	0	0	98	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	1321	0	0	1121	0	0	0	0	98	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	294	1321	0	0	1121	0	0	0	0	98	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.41	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	997	129	0	850	347	639	15	368	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	997	129	0	850	347	639	15	368	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	997	129	0	850	347	639	15	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	997	129	0	850	347	639	15	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	997	129	0	850	347	639	15	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2833	367	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.35	0.00	0.27	0.22	0.22	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.295
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	199	120	35	220	0	0	0	0	117	0	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	199	120	35	220	0	0	0	0	117	0	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	199	120	35	220	0	0	0	0	117	0	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	199	120	35	220	0	0	0	0	117	0	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	199	120	35	220	0	0	0	0	117	0	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.25	0.75	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	1996	1204	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.02	0.07	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	201	111	159	255	73	36	312	50	82	183	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	201	111	159	255	73	36	312	50	82	183	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	201	111	159	255	73	36	312	50	82	183	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	201	111	159	255	73	36	312	50	82	183	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	201	111	159	255	73	36	312	50	82	183	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.29	0.71	1.00	1.55	0.45	1.00	1.72	0.28	1.00	1.10	0.90
Final Sat.:	1600	2062	1138	1600	2488	712	1600	2758	442	1600	1764	1436
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.10	0.10	0.10	0.02	0.11	0.11	0.05	0.10	0.10
Crit Moves:		****				****		****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.362
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	376	698	0	4	461	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	376	698	0	4	461	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	376	698	0	4	461	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	376	698	0	4	461	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	376	698	0	4	461	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.22	0.00	0.00	0.14	0.13
Crit Moves:							****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.614
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	259	0	355	0	936	0	0	500	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	259	0	355	0	936	0	0	500	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	259	0	355	0	936	0	0	500	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	259	0	355	0	936	0	0	500	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	259	0	355	0	936	0	0	500	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.22	0.00	0.29	0.00	0.00	0.10	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.437
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	208	0	149	275	272	0	0	291	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	208	0	149	275	272	0	0	291	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	208	0	149	275	272	0	0	291	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	208	0	149	275	272	0	0	291	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	208	0	149	275	272	0	0	291	67
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.63	0.37
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2601	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.09	0.10	0.09	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.299
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	138	0	0	0	0	0	0	84	180	0	48	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	138	0	0	0	0	0	0	84	180	0	48	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	0	0	0	0	0	0	84	180	0	48	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	0	0	0	0	0	0	84	180	0	48	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	0	0	0	0	0	0	84	180	0	48	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.00	0.03	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.341
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 2	1 0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	0	1156	0	0	1044	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1156	0	0	1044	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1156	0	0	1044	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1156	0	0	1044	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1156	0	0	1044	0	0	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4800	0	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****		****								

Future with Project Conditions (County of Los Angeles) 2020 Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	473	189	268	550	0	1	0	3	197	0	258
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	473	189	268	550	0	1	0	3	197	0	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	473	189	268	550	0	1	0	3	197	0	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	473	189	268	550	0	1	0	3	197	0	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	473	189	268	550	0	1	0	3	197	0	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.42	0.57	1.00	2.00	0.00	0.25	0.00	0.75	1.00	0.00	1.00
Final Sat.:	19	2273	908	1600	3200	0	400	0	1200	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.17	0.17	0.00	0.00	0.00	0.00	0.12	0.00	0.16
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1	1 0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	703	0	0	772	70	0	0	0	106	324	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	703	0	0	772	70	0	0	0	106	324	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	703	0	0	772	70	0	0	0	106	324	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	703	0	0	772	70	0	0	0	106	324	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	703	0	0	772	70	0	0	0	106	324	257
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.31	0.94	0.75
Final Sat.:	1600	3200	0	0	2934	266	0	0	0	494	1509	1197
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.07	0.21	0.21
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.482
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	645	68	163	773	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	645	68	163	773	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	645	68	163	773	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	645	68	163	773	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	645	68	163	773	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2895	305	1600	3200	0	1600	1235	365	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.10	0.24	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	585	357	65	533	150	128	749	34	265	1049	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	585	357	65	533	150	128	749	34	265	1049	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	585	357	65	533	150	128	749	34	265	1049	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.56	0.44	1.00	2.87	0.13	1.00	2.82	0.18
Final Sat.:	1600	1987	1213	1600	2497	703	1600	4592	208	1600	4508	292
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.04	0.21	0.21	0.08	0.16	0.16	0.17	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.657
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	314	653	7	13	562	259	318	18	182	13	54	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	314	653	7	13	562	259	318	18	182	13	54	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	314	653	7	13	562	259	318	18	182	13	54	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	314	653	7	13	562	259	318	18	182	13	54	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	314	653	7	13	562	259	318	18	182	13	54	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.95	0.05	1.00	0.13	0.55	0.32
Final Sat.:	2880	3166	34	1600	3200	1600	1514	86	1600	210	873	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.01	0.18	0.16	0.21	0.21	0.11	0.06	0.06	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.569
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	965	171	177	1149	0	0	0	0	389	0	600
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	965	171	177	1149	0	0	0	0	389	0	600
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	965	171	177	1149	0	0	0	0	389	0	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	965	171	177	1149	0	0	0	0	389	0	600
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	965	171	177	1149	0	0	0	0	389	0	600
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.01	1.82
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1888	0	2912
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.06	0.24	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	780	188	339	772	376	181	129	311	101	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	780	188	339	772	376	181	129	311	101	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	780	188	339	772	376	181	129	311	101	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	780	188	339	772	376	181	129	311	101	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	780	188	339	772	376	181	129	311	101	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.02	0.98	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3228	1572	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	136	787	216	379	822	78	85	505	81	118	421	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	787	216	379	822	78	85	505	81	118	421	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	787	216	379	822	78	85	505	81	118	421	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	787	216	379	822	78	85	505	81	118	421	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	787	216	379	822	78	85	505	81	118	421	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4384	416	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.14	0.13	0.19	0.19	0.05	0.16	0.05	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	1085	62	37	988	8	57	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	1085	62	37	988	8	57	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	1085	62	37	988	8	57	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	1085	62	37	988	8	57	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	1085	62	37	988	8	57	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.98	0.02	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4761	39	894	0	706	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.04	0.02	0.21	0.21	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	947	484	289	752	0	0	0	0	253	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	947	484	289	752	0	0	0	0	253	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	947	484	289	752	0	0	0	0	253	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	947	484	289	752	0	0	0	0	253	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	947	484	289	752	0	0	0	0	253	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.10	0.16	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	129	1311	0	0	867	124	126	0	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1311	0	0	867	124	126	0	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1311	0	0	867	124	126	0	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1311	0	0	867	124	126	0	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	1311	0	0	867	124	126	0	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.62	0.38	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4199	601	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.00	0.00	0.21	0.21	0.08	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1385	67	35	909	0	1	0	1	102	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1385	67	35	909	0	1	0	1	102	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1385	67	35	909	0	1	0	1	102	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1385	67	35	909	0	1	0	1	102	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1385	67	35	909	0	1	0	1	102	0	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4579	221	1600	4800	0	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.02	0.19	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	217	1341	114	68	872	97	65	9	137	160	13	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1341	114	68	872	97	65	9	137	160	13	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1341	114	68	872	97	65	9	137	160	13	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1341	114	68	872	97	65	9	137	160	13	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1341	114	68	872	97	65	9	137	160	13	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.76	0.24	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	2880	4424	376	1600	4800	1600	1600	1600	1600	1600	181	1419
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.18	0.06	0.04	0.01	0.09	0.10	0.07	0.07
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	1003	134	208	725	320	361	549	97	184	873	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	1003	134	208	725	320	361	549	97	184	873	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	1003	134	208	725	320	361	549	97	184	873	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.08	0.92	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3330	1470	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.08	0.07	0.22	0.22	0.23	0.17	0.06	0.12	0.27	0.08
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	471	1210	0	0	857	288	0	0	0	105	0	505
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	471	1210	0	0	857	288	0	0	0	105	0	505
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	471	1210	0	0	857	0	0	0	0	105	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	471	1210	0	0	857	0	0	0	0	105	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	471	1210	0	0	857	0	0	0	0	105	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.38	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1105	139	0	610	355	503	32	588	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1105	139	0	610	355	503	32	588	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1105	139	0	610	355	503	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1105	139	0	610	355	503	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1105	139	0	610	355	503	32	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2842	358	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.17	0.01	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	567	120	65	531	0	0	0	0	481	0	405
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	567	120	65	531	0	0	0	0	481	0	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	567	120	65	531	0	0	0	0	481	0	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	567	120	65	531	0	0	0	0	481	0	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	567	120	65	531	0	0	0	0	481	0	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.65	0.35	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2641	559	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.04	0.17	0.00	0.00	0.00	0.00	0.30	0.00	0.25
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	114	418	138	163	471	277	32	302	76	156	419	228
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	418	138	163	471	277	32	302	76	156	419	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	418	138	163	471	277	32	302	76	156	419	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	418	138	163	471	277	32	302	76	156	419	228
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	418	138	163	471	277	32	302	76	156	419	228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.26	0.74	1.00	1.60	0.40	1.00	1.30	0.70
Final Sat.:	1600	2406	794	1600	2015	1185	1600	2557	643	1600	2072	1128
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.23	0.23	0.02	0.12	0.12	0.10	0.20	0.20
Crit Moves:			****		****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	129	471	117	62	458	95	68	416	141	184	534	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	471	117	62	458	95	68	416	141	184	534	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	471	117	62	458	95	68	416	141	184	534	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	471	117	62	458	95	68	416	141	184	534	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	471	117	62	458	95	68	416	141	184	534	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	1.49	0.51	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2650	550	1600	2390	810	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.07	0.04	0.17	0.17	0.04	0.17	0.17	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	151	569	89	49	400	120	151	569	144	60	579	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	569	89	49	400	120	151	569	144	60	579	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	569	89	49	400	120	151	569	144	60	579	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	569	89	49	400	120	151	569	144	60	579	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	569	89	49	400	120	151	569	144	60	579	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2829	371
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.03	0.13	0.08	0.09	0.18	0.09	0.04	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	162	921	0	0	594	239
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	162	921	0	0	594	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	162	921	0	0	594	239
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	162	921	0	0	594	239
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	162	921	0	0	594	239
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.00	0.00	0.19	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.802
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	281	0	740	0	765	0	0	619	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	740	0	765	0	0	619	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	740	0	765	0	0	619	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	740	0	765	0	0	619	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	740	0	765	0	0	619	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.46	0.00	0.24	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.809
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	131	532	23	194	737	673	221	218	131	23	298	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	532	23	194	737	673	221	218	131	23	298	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	532	23	194	737	673	221	218	131	23	298	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	532	23	194	737	673	221	218	131	23	298	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	532	23	194	737	673	221	218	131	23	298	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.44	0.56
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	1999	1201	1600	2298	902
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.42	0.08	0.11	0.11	0.01	0.13	0.13
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	130	157	50	63	14	37	293	80	418	737	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	157	50	63	14	37	293	80	418	737	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	157	50	63	14	37	293	80	418	737	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	157	50	63	14	37	293	80	418	737	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	157	50	63	14	37	293	80	418	737	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2618	582	1600	2514	686	1600	2166	1034
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0 1	1	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	79	110	372	95	0	0	0	0	773	0	325
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	372	95	0	0	0	0	773	0	325
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	0	372	95	0	0	0	0	773	0	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	0	372	95	0	0	0	0	773	0	325
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	0	372	95	0	0	0	0	773	0	325
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.41	0.00	0.59
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	2253	0	947
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.00	0.23	0.06	0.00	0.00	0.00	0.00	0.34	0.00	0.34
Crit Moves:		****		****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	57.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.093

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	372	95	773	325
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	372	95	773	325
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	93	24	193	81
Total Analysis Volume [veh/h]	79	110	372	95	773	325
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	459	503	456	486	549	558
Degree of Utilization, x	0.17	0.22	0.82	0.20	1.09	0.98

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	7.69	0.72	17.55	13.81
95th-Percentile Queue Length [ft]	15.42	20.66	192.24	17.96	438.81	345.36
Approach Delay [s/veh]	11.99		32.05		76.44	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	57.67					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	193	641	378	50	347	349	56	381	77	172	891	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	378	50	347	349	56	381	77	172	891	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	378	50	347	349	56	381	77	172	891	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	378	50	347	349	56	381	77	172	891	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	378	50	347	349	56	381	77	172	891	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2662	538	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.24	0.03	0.11	0.22	0.04	0.14	0.14	0.11	0.28	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	685	599	0	0	411	193	607	0	223	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	685	599	0	0	411	193	607	0	223	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	685	599	0	0	411	193	607	0	223	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	685	599	0	0	411	193	607	0	223	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	685	599	0	0	411	193	607	0	223	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2340	0	860	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.19	0.00	0.00	0.13	0.12	0.26	0.00	0.26	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	278	0	267	281	328	0	0	495	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	267	281	328	0	0	495	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	267	281	328	0	0	495	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	267	281	328	0	0	495	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	267	281	328	0	0	495	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2717	483
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.17	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.694

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	269	739	728	5	0	184
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	269	739	728	5	0	184
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	185	182	1	0	46
Total Analysis Volume [veh/h]	269	739	728	5	0	184
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.69	0.82	0.45	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.13	11.81	7.86	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.52	2.04	0.86	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	38.00	51.05	21.56	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.76		7.80		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	10.18					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.401
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0 1	0 1	1 0	1 0	0
Volume Module:												
Base Vol:	183	0	29	0	0	0	0	189	260	38	252	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	0	29	0	0	0	0	189	260	38	252	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	0	29	0	0	0	0	189	260	38	252	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	0	29	0	0	0	0	189	260	38	252	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	0	29	0	0	0	0	189	260	38	252	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.12	0.16	0.02	0.16	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	90	1424	0	0	950	51	31	0	57	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1424	0	0	950	51	31	0	57	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1424	0	0	950	51	31	0	57	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1424	0	0	950	51	31	0	57	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1424	0	0	950	51	31	0	57	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4555	245	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.00	0.00	0.21	0.21	0.02	0.00	0.04	0.00	0.00	0.00
Crit Moves:		****		****					****			

Future with Project Conditions (County of Los Angeles) 2020 Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	538	318	487	686	0	0	0	3	181	0	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	538	318	487	686	0	0	0	3	181	0	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	538	318	487	686	0	0	0	3	181	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	538	318	487	686	0	0	0	3	181	0	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	538	318	487	686	0	0	0	3	181	0	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.25	0.74	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	7	2007	1186	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.30	0.21	0.00	0.00	0.00	0.00	0.11	0.00	0.21
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	735	0	0	1349	92	0	0	0	101	121	277
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	735	0	0	1349	92	0	0	0	101	121	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	735	0	0	1349	92	0	0	0	101	121	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	735	0	0	1349	92	0	0	0	101	121	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	735	0	0	1349	92	0	0	0	101	121	277
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.40	0.60	1.00
Final Sat.:	1600	3200	0	0	2996	204	0	0	0	648	952	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.06	0.13	0.17
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	700	149	315	1135	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	700	149	315	1135	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	700	149	315	1135	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2638	562	1600	3200	0	1600	1389	211	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.35	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.017
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	491	414	153	867	186	230	1407	102	358	1003	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.09	0.91	1.00	1.65	0.35	1.00	2.80	0.20	1.00	2.69	0.31
Final Sat.:	1600	1736	1464	1600	2635	565	1600	4476	324	1600	4302	498
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.10	0.33	0.33	0.14	0.31	0.31	0.22	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.783
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2	0 1	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	189	477	11	38	885	364	438	57	483	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	477	11	38	885	364	438	57	483	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	189	477	11	38	885	364	438	57	483	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	477	11	38	885	364	438	57	483	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	477	11	38	885	364	438	57	483	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.88	0.12	1.00	0.12	0.34	0.54
Final Sat.:	2880	3128	72	1600	3200	1600	1416	184	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.02	0.28	0.23	0.31	0.31	0.30	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1260	243	163	1164	0	0	0	0	421	0	449
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	243	163	1164	0	0	0	0	421	0	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1260	243	163	1164	0	0	0	0	421	0	449
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1260	243	163	1164	0	0	0	0	421	0	449
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1260	243	163	1164	0	0	0	0	421	0	449
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.45	0.00	1.55
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2323	0	2477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.15	0.06	0.24	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	1003	210	261	1063	263	287	797	586	150	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3848	952	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.21	0.13	0.16	0.28	0.28	0.18	0.29	0.29	0.09	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	997	255	427	1199	85	114	662	158	218	712	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	997	255	427	1199	85	114	662	158	218	712	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	997	255	427	1199	85	114	662	158	218	712	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4482	318	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.16	0.15	0.27	0.27	0.07	0.21	0.10	0.14	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.524
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1284	39	55	1494	33	73	0	30	50	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1284	39	55	1494	33	73	0	30	50	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1284	39	55	1494	33	73	0	30	50	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1284	39	55	1494	33	73	0	30	50	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1284	39	55	1494	33	73	0	30	50	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	0.71	0.00	0.29	1.53	xxxx	1.47
Final Sat.:	1600	4800	1600	1600	4696	104	1134	0	466	2449	0	2351
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.02	0.03	0.32	0.32	0.06	0.00	0.06	0.02	0.00	0.02
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1165	353	351	1300	0	0	0	0	496	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.27	0.00	0.00	0.00	0.00	0.31	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	110	1268	0	0	1674	120	235	0	198	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	1268	0	0	1674	120	235	0	198	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	1268	0	0	1674	120	235	0	198	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1268	0	0	1674	120	235	0	198	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1268	0	0	1674	120	235	0	198	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4479	321	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.00	0.00	0.37	0.37	0.15	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 1	0	1 0	2 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	38	1323	72	60	1746	64	30	0	18	35	1	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1323	72	60	1746	64	30	0	18	35	1	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1323	72	60	1746	64	30	0	18	35	1	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	1323	72	60	1746	64	30	0	18	35	1	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	1323	72	60	1746	64	30	0	18	35	1	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.85	0.15	1.00	2.89	0.11	1.00	0.00	1.00	1.00	0.03	0.97
Final Sat.:	1600	4552	248	1600	4630	170	1600	0	1600	1600	43	1557
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.29	0.04	0.38	0.38	0.02	0.00	0.01	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	222	1374	193	103	1720	92	64	14	135	84	16	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	1374	193	103	1720	92	64	14	135	84	16	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	1374	193	103	1720	92	64	14	135	84	16	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1374	193	103	1720	92	64	14	135	84	16	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	1374	193	103	1720	92	64	14	135	84	16	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.63	0.37	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	2880	4209	591	1600	4800	1600	1600	1600	1600	1600	337	1263
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.06	0.36	0.06	0.04	0.01	0.08	0.05	0.05	0.05
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.999
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	1169	179	330	1122	426	346	998	243	253	652	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.17	0.83	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3479	1321	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.11	0.11	0.32	0.32	0.22	0.31	0.15	0.16	0.20	0.12
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	345	1199	0	0	1516	534	0	0	0	185	2	513
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	345	1199	0	0	1516	534	0	0	0	185	2	513
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	345	1199	0	0	1516	0	0	0	0	185	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	345	1199	0	0	1516	0	0	0	0	185	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	345	1199	0	0	1516	0	0	0	0	185	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.98	0.02	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3166	34	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.37	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1161	184	0	1172	533	348	224	454	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1161	184	0	1172	533	348	224	454	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1161	184	0	1172	533	348	224	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1161	184	0	1172	533	348	224	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1161	184	0	1172	533	348	224	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2762	438	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.33	0.12	0.07	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	638	157	108	795	0	0	0	0	257	0	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	638	157	108	795	0	0	0	0	257	0	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	638	157	108	795	0	0	0	0	257	0	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	638	157	108	795	0	0	0	0	257	0	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	638	157	108	795	0	0	0	0	257	0	326
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2568	632	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.07	0.25	0.00	0.00	0.00	0.00	0.16	0.00	0.20
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.927
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	109	496	153	223	678	170	58	648	150	176	247	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	496	153	223	678	170	58	648	150	176	247	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	496	153	223	678	170	58	648	150	176	247	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	496	153	223	678	170	58	648	150	176	247	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	496	153	223	678	170	58	648	150	176	247	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.60	0.40	1.00	1.62	0.38	1.00	1.02	0.98
Final Sat.:	1600	2446	754	1600	2558	642	1600	2598	602	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.14	0.26	0.27	0.04	0.25	0.25	0.11	0.15	0.15
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	450	161	163	728	86	81	1004	215	127	638	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	450	161	163	728	86	81	1004	215	127	638	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	450	161	163	728	86	81	1004	215	127	638	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	1.65	0.35	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2862	338	1600	2636	564	1600	2638	562
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.10	0.10	0.25	0.25	0.05	0.38	0.38	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.748
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	105	500	144	74	715	107	114	1018	219	67	834	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	105	500	144	74	715	107	114	1018	219	67	834	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	500	144	74	715	107	114	1018	219	67	834	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	500	144	74	715	107	114	1018	219	67	834	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	500	144	74	715	107	114	1018	219	67	834	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	2484	716	1600	3200	1600	1600	3200	1600	1600	2898	302
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.05	0.22	0.07	0.07	0.32	0.14	0.04	0.29	0.29
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	455	1361	0	0	755	335
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	455	1361	0	0	755	335
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	455	1361	0	0	755	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	455	1361	0	0	755	335
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	455	1361	0	0	755	335
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.43	0.00	0.00	0.24	0.21
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	394	0	466	0	1430	0	0	749	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	394	0	466	0	1430	0	0	749	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	394	0	466	0	1430	0	0	749	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.29	0.00	0.45	0.00	0.00	0.16	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	152	533	35	174	656	336	504	713	215	18	374	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	533	35	174	656	336	504	713	215	18	374	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	533	35	174	656	336	504	713	215	18	374	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	533	35	174	656	336	504	713	215	18	374	211
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	533	35	174	656	336	504	713	215	18	374	211
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.54	0.46	1.00	1.28	0.72
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2459	741	1600	2046	1154
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.02	0.06	0.21	0.21	0.17	0.29	0.29	0.01	0.18	0.18
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.949
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	133	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	282	292	315	62	13	641	197	366	502	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	282	292	315	62	13	641	197	366	502	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	282	292	315	62	13	641	197	366	502	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	282	292	315	62	13	641	197	366	502	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	282	292	315	62	13	641	197	366	502	97
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.68	0.32
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2448	752	1600	2682	518
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.23	0.19	0.19
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	0 1	1	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	61	534	733	169	0	0	0	0	331	0	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	733	169	0	0	0	0	331	0	260
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	0	733	169	0	0	0	0	331	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	0	733	169	0	0	0	0	331	0	260
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	0	733	169	0	0	0	0	331	0	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.12	0.00	0.88
Final Sat.:	0	1600	1600	1600	1600	0	0	0	0	1792	0	1408
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.00	0.46	0.11	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	133.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.613

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	733	169	331	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	733	169	331	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	183	42	83	65
Total Analysis Volume [veh/h]	61	534	733	169	331	260
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	475	534	733	485	439	504
Degree of Utilization, x	0.13	1.02	1.61	0.35	0.67	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.44	14.86	41.46	1.54	4.86	3.73
95th-Percentile Queue Length [ft]	10.97	371.57	1036.51	38.61	121.44	93.22
Approach Delay [s/veh]	64.73		251.35		22.84	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	133.49					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.053
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	410	185	693	206	68	1033	132	348	693	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	410	185	693	206	68	1033	132	348	693	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	410	185	693	206	68	1033	132	348	693	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2837	363	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.26	0.12	0.22	0.13	0.04	0.36	0.36	0.22	0.22	0.05
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	503	420	0	0	888	302	460	0	138	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	503	420	0	0	888	302	460	0	138	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	503	420	0	0	888	302	460	0	138	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	503	420	0	0	888	302	460	0	138	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	503	420	0	0	888	302	460	0	138	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.54	0.00	0.46	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2462	0	738	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.28	0.19	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	426	0	363	229	815	0	0	352	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	426	0	363	229	815	0	0	352	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	426	0	363	229	815	0	0	352	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	426	0	363	229	815	0	0	352	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	426	0	363	229	815	0	0	352	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2721	479
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.23	0.08	0.25	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	20.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	215	780	797	18	0	490
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	215	780	797	18	0	490
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	195	199	5	0	123
Total Analysis Volume [veh/h]	215	780	797	18	0	490
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.62	0.87	0.49	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.96	12.08	7.94	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.29	2.23	0.97	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	32.27	55.84	24.25	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.78		7.76		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.71					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	352	0	55	0	0	0	0	428	350	53	178	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	352	0	55	0	0	0	0	428	350	53	178	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	352	0	55	0	0	0	0	428	350	53	178	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	352	0	55	0	0	0	0	428	350	53	178	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	352	0	55	0	0	0	0	428	350	53	178	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.03	0.00	0.00	0.00	0.00	0.27	0.22	0.03	0.11	0.00
Crit Moves:	****							****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.633
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	161	1353	0	0	1745	83	84	0	163	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1353	0	0	1745	83	84	0	163	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1353	0	0	1745	83	84	0	163	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1353	0	0	1745	83	84	0	163	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1353	0	0	1745	83	84	0	163	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.86	0.14	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4582	218	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.00	0.00	0.38	0.38	0.05	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

Future with Project Conditions
(County of Los Angeles) 2020
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.820
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	1! 0	0	1 0	1! 0	0
Volume Module:												
Base Vol:	0	301	239	448	312	0	0	0	0	197	0	434
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	301	239	448	312	0	0	0	0	197	0	434
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	301	239	448	312	0	0	0	0	197	0	434
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	301	239	448	312	0	0	0	0	197	0	434
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	301	239	448	312	0	0	0	0	197	0	434
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.11	0.89	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1784	1416	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.28	0.10	0.00	0.00	0.00	0.00	0.12	0.00	0.27
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.468
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	432	0	0	607	26	0	0	0	258	92	178
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	432	0	0	607	26	0	0	0	258	92	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	432	0	0	607	26	0	0	0	258	92	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	432	0	0	607	26	0	0	0	258	92	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	432	0	0	607	26	0	0	0	258	92	178
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.92	0.08	0.00	0.00	0.00	0.98	0.35	0.67
Final Sat.:	1600	3200	0	0	3069	131	0	0	0	1564	558	1079
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.16	0.16
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	435	247	166	698	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	435	247	166	698	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	435	247	166	698	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	435	247	166	698	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	435	247	166	698	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.28	0.72	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2041	1159	1600	3200	0	1600	1339	261	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.22	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.476
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	881	306	113	876	0	0	0	0	467	0	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	881	306	113	876	0	0	0	0	467	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	881	306	113	876	0	0	0	0	467	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	881	306	113	876	0	0	0	0	467	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	881	306	113	876	0	0	0	0	467	0	218
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.19	0.04	0.18	0.00	0.00	0.00	0.00	0.15	0.00	0.14
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.493
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 3	0 0		0 0 2	1 0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	73 1373	0		0 1331	53		94	0	74	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	73 1373	0		0 1331	53		94	0	74	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	73 1373	0		0 1331	53		94	0	74	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	73 1373	0		0 1331	53		94	0	74	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	73 1373	0		0 1331	53		94	0	74	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600 1600	1600		1600 1600	1600		1600 1600	1600		1600 1600	1600	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 3.00	0.00		0.00 2.89	0.11		1.00 0.00	1.00		0.00 0.00	0.00	
Final Sat.:	1600 4800	0		0 4616	184		1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05 0.29	0.00		0.00 0.29	0.29		0.06 0.00	0.05		0.00 0.00	0.00	
Crit Moves:	****			****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.588
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	162	1292	53	49	1252	108	83	0	124	41	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	1292	53	49	1252	108	83	0	124	41	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	1292	53	49	1252	108	83	0	124	41	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1292	53	49	1252	108	83	0	124	41	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1292	53	49	1252	108	83	0	124	41	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	2.76	0.24	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4611	189	1600	4419	381	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.28	0.28	0.03	0.28	0.28	0.05	0.00	0.08	0.03	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	200	1497	149	39	1438	73	64	19	134	121	18	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1497	149	39	1438	73	64	19	134	121	18	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1497	149	39	1438	73	64	19	134	121	18	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1497	149	39	1438	73	64	19	134	121	18	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	200	1497	149	39	1438	73	64	19	134	121	18	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.73	0.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.28	0.72
Final Sat.:	2880	4365	435	1600	4800	1600	1600	1600	1600	1600	450	1150
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.34	0.02	0.30	0.05	0.04	0.01	0.08	0.08	0.04	0.04
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.041
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1109	160	304	1004	426	472	498	269	239	461	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3370	1430	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.23	0.10	0.11	0.30	0.30	0.30	0.16	0.17	0.15	0.14	0.12
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	526	1548	0	0	1468	708	0	0	0	426	0	644
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	526	1548	0	0	1468	708	0	0	0	426	0	644
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	526	1548	0	0	1468	0	0	0	0	426	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	526	1548	0	0	1468	0	0	0	0	426	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	526	1548	0	0	1468	0	0	0	0	426	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.48	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.113
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	278	1186	177	0	1032	838	909	273	679	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1186	177	0	1032	838	909	273	679	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1186	177	0	1032	838	909	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1186	177	0	1032	838	909	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1186	177	0	1032	838	909	273	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2784	416	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.32	0.52	0.32	0.09	0.00	0.00	0.00	0.00
Crit Moves:	****					****	****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.357
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	324	161	35	349	0	0	0	0	134	0	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	324	161	35	349	0	0	0	0	134	0	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	324	161	35	349	0	0	0	0	134	0	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	324	161	35	349	0	0	0	0	134	0	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	324	161	35	349	0	0	0	0	134	0	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2138	1062	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.02	0.11	0.00	0.00	0.00	0.00	0.08	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	364	130	161	399	73	36	312	50	129	183	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	364	130	161	399	73	36	312	50	129	183	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	364	130	161	399	73	36	312	50	129	183	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	364	130	161	399	73	36	312	50	129	183	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	364	130	161	399	73	36	312	50	129	183	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.69	0.31	1.00	1.72	0.28	1.00	1.10	0.90
Final Sat.:	1600	2358	842	1600	2705	495	1600	2758	442	1600	1753	1447
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.10	0.15	0.15	0.02	0.11	0.11	0.08	0.10	0.10
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	380	871	0	4	541	316
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	380	871	0	4	541	316
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	380	871	0	4	541	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	380	871	0	4	541	316
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	380	871	0	4	541	316
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.27	0.00	0.00	0.17	0.20
Crit Moves:							****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	354	0	360	0	1019	0	0	580	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	354	0	360	0	1019	0	0	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	354	0	360	0	1019	0	0	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.23	0.00	0.32	0.00	0.00	0.12	0.00
Crit Moves:				****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	207	0	194	292	272	0	0	291	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	207	0	194	292	272	0	0	291	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	207	0	194	292	272	0	0	291	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	207	0	194	292	272	0	0	291	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	207	0	194	292	272	0	0	291	67
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.63	0.37
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2601	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.12	0.10	0.09	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0	1 0 1	1	0 1	0 0
Volume Module:												
Base Vol:	496	0	17	0	0	0	0	84	512	16	46	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	496	0	17	0	0	0	0	84	512	16	46	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	496	0	17	0	0	0	0	84	512	16	46	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	496	0	17	0	0	0	0	84	512	16	46	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	496	0	17	0	0	0	0	84	512	16	46	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.31	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.32	0.01	0.03	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	224	1362	0	0	1269	120	125	0	245	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	224	1362	0	0	1269	120	125	0	245	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	224	1362	0	0	1269	120	125	0	245	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	1362	0	0	1269	120	125	0	245	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	224	1362	0	0	1269	120	125	0	245	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.74	0.26	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4385	415	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.28	0.00	0.00	0.29	0.29	0.08	0.00	0.15	0.00	0.00	0.00
Crit Moves:	****				****				****			

Existing with Project with Mitigation Conditions 2018 Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	724	153	339	663	376	181	127	311	86	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	724	153	339	663	376	181	127	311	86	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	724	153	339	663	376	181	127	311	86	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	724	153	339	663	376	181	127	311	86	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	724	153	339	663	376	181	127	311	86	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	3200	4800	1600	1600	3200	1600	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.10	0.21	0.21	0.24	0.11	0.08	0.10	0.05	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	114	377	123	152	428	277	32	302	76	127	419	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	377	123	152	428	277	32	302	76	127	419	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	377	123	152	428	277	32	302	76	127	419	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	377	123	152	428	277	32	302	76	127	419	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	377	123	152	428	277	32	302	76	127	419	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.21	0.79	1.00	2.00	1.00	1.00	1.30	0.70
Final Sat.:	1600	2413	787	1600	1943	1257	1600	3200	1600	1600	2079	1121
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.10	0.22	0.22	0.02	0.09	0.05	0.08	0.20	0.20
Crit Moves:		****				****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	62	416	117	62	386	95	68	408	48	184	529	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	416	117	62	386	95	68	408	48	184	529	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	416	117	62	386	95	68	408	48	184	529	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	416	117	62	386	95	68	408	48	184	529	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	416	117	62	386	95	68	408	48	184	529	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	2.00	1.00	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2568	632	1600	3200	1600	1600	2608	592
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.07	0.04	0.15	0.15	0.04	0.13	0.03	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	79	110	337	95	0	0	0	0	764	0	234
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0	79	110	337	95	0	0	0	0	764	0	234
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0	79	110	337	95	0	0	0	0	764	0	234
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	110	337	95	0	0	0	0	764	0	234
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0	79	110	337	95	0	0	0	0	764	0	234
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600 1600	1600		1600 1600	1600		1600 1600	1600		1600 1600	1600	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	0.00 1.00	1.00		1.56 0.44	0.00		0.00 0.00	0.00		1.53 0.00	0.47	
Final Sat.:	0 1600	1600		2496 704	0		0 0	0		2450 0	750	
Capacity Analysis Module:												
Vol/Sat:	0.00 0.05	0.07		0.13 0.14	0.00		0.00 0.00	0.00		0.31 0.00	0.31	
OvlAdjV/S:			0.00									
Crit Moves:	****			****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.518

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	337	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	337	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	84	24	191	59
Total Analysis Volume [veh/h]	79	110	337	95	764	234
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	62	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	9	9	12	12
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate	0.04	0.07	0.12	0.22	0.28	0.30
s, saturation flow rate [veh/h]	1870	1589	1320	1207	1781	1686
c, Capacity [veh/h]	596	507	529	588	724	686
d1, Uniform Delay [s]	7.06	7.27	10.28	9.25	7.12	7.29
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.21	0.33	0.55	1.18	1.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.22	0.31	0.46	0.69	0.73
d, Delay for Lane Group [s/veh]	7.16	7.48	10.61	9.80	8.30	8.78
Lane Group LOS	A	A	B	A	A	A
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.24	0.34	0.70	1.11	1.57	1.65
50th-Percentile Queue Length [ft]	5.88	8.58	17.59	27.79	39.18	41.13
95th-Percentile Queue Length [veh]	0.42	0.62	1.27	2.00	2.82	2.96
95th-Percentile Queue Length [ft]	10.58	15.44	31.66	50.03	70.53	74.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.16	7.48	10.22	9.80	8.47	8.78
Movement LOS	A	A	B	A	A	A
d_A, Approach Delay [s/veh]	7.35		10.11		8.54	
Approach LOS	A		B		A	
d_I, Intersection Delay [s/veh]	8.82					
Intersection LOS	A					
Intersection V/C	0.518					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	4.444	4.845	5.779
Bicycle LOS	E	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Existing with Project with Mitigation Conditions 2018 Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.824
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	922	154	261	909	263	287	787	586	132	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	922	154	261	909	263	287	787	586	132	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	922	154	261	909	263	287	787	586	132	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	922	154	261	909	263	287	787	586	132	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	922	154	261	909	263	287	787	586	132	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.33	0.67	1.00	1.72	1.28	1.00	1.00	2.00
Final Sat.:	3200	4800	1600	1600	3723	1077	1600	2751	2049	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.10	0.16	0.24	0.24	0.18	0.29	0.29	0.08	0.01	0.06
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.803
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	109	418	139	220	613	170	58	648	150	130	247	226
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	418	139	220	613	170	58	648	150	130	247	226
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	418	139	220	613	170	58	648	150	130	247	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	418	139	220	613	170	58	648	150	130	247	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	418	139	220	613	170	58	648	150	130	247	226
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.57	0.43	1.00	2.00	1.00	1.00	1.04	0.96
Final Sat.:	1600	2401	799	1600	2505	695	1600	3200	1600	1600	1671	1529
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.14	0.24	0.24	0.04	0.20	0.09	0.08	0.15	0.15
Crit Moves:			****		****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	67	358	161	163	618	86	81	979	96	127	611	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	67	358	161	163	618	86	81	979	96	127	611	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	67	358	161	163	618	86	81	979	96	127	611	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	358	161	163	618	86	81	979	96	127	611	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	358	161	163	618	86	81	979	96	127	611	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.76	0.24	1.00	2.00	1.00	1.00	1.64	0.36
Final Sat.:	1600	3200	1600	1600	2809	391	1600	3200	1600	1600	2617	583
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.10	0.10	0.22	0.22	0.05	0.31	0.06	0.08	0.23	0.23
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1	0 1	1	1 0	0 0	0	0 0	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	0	61	534	648	169	0	0	0	0	296	0	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	648	169	0	0	0	0	296	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	534	648	169	0	0	0	0	296	0	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	534	648	169	0	0	0	0	296	0	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	534	648	169	0	0	0	0	296	0	102
OvlAdjVol:			335									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.59	0.41	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	1600	1600	2538	662	0	0	0	0	2380	0	820
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.33	0.26	0.26	0.00	0.00	0.00	0.00	0.12	0.00	0.12
OvlAdjV/S:			0.21									
Crit Moves:			****		****					****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.472

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	648	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	648	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	162	42	74	26
Total Analysis Volume [veh/h]	61	534	648	169	296	102
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	74	0	0	74	16	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	25	25	25	25	25	25
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	5	5
g / C, Green / Cycle	0.48	0.48	0.48	0.48	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.03	0.34	0.26	0.36	0.12	0.12
s, saturation flow rate [veh/h]	1870	1589	1341	1325	1781	1674
c, Capacity [veh/h]	894	760	786	868	365	343
d1, Uniform Delay [s]	3.55	5.17	6.67	5.87	9.02	9.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	1.20	0.39	0.53	1.36	1.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.70	0.44	0.54	0.56	0.56
d, Delay for Lane Group [s/veh]	3.58	6.37	7.05	6.41	10.38	10.47
Lane Group LOS	A	A	A	A	B	B
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.06	0.88	0.79	0.62	0.77	0.73
50th-Percentile Queue Length [ft]	1.43	22.03	19.70	15.55	19.13	18.23
95th-Percentile Queue Length [veh]	0.10	1.59	1.42	1.12	1.38	1.31
95th-Percentile Queue Length [ft]	2.57	39.66	35.45	27.99	34.43	32.82

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	3.58	6.37	6.76	6.41	10.40	10.47
Movement LOS	A	A	A	A	B	B
d_A, Approach Delay [s/veh]	6.09		6.68		10.42	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	7.31					
Intersection LOS	A					
Intersection V/C	0.472					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	5.114	5.480	4.789
Bicycle LOS	F	F	E

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Existing with Project with Mitigation Conditions 2018 Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	201	111	159	255	73	36	312	50	82	183	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	201	111	159	255	73	36	312	50	82	183	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	201	111	159	255	73	36	312	50	82	183	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	201	111	159	255	73	36	312	50	82	183	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	201	111	159	255	73	36	312	50	82	183	149
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.29	0.71	1.00	1.55	0.45	1.00	2.00	1.00	1.00	1.10	0.90
Final Sat.:	1600	2062	1138	1600	2488	712	1600	3200	1600	1600	1764	1436
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.10	0.10	0.10	0.02	0.10	0.03	0.05	0.10	0.10
Crit Moves:		****				****		****		****		

Future with Project with Mitigation Conditions (County of Los Angeles) 2020 Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.511
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1	0 1	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 1
Volume Module:												
Base Vol:	4	473	189	268	550	0	1	0	3	197	0	258
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	473	189	268	550	0	1	0	3	197	0	258
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	473	189	268	550	0	1	0	3	197	0	258
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	473	189	268	550	0	1	0	3	197	0	258
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	473	189	268	550	0	1	0	3	197	0	258
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.98	1.00	1.00	2.00	0.00	0.25	0.00	0.75	1.30	xxxx	1.70
Final Sat.:	27	3173	1600	1600	3200	0	400	0	1200	2078	0	2722
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.12	0.17	0.17	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.462
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	645	68	163	773	0	29	71	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	645	68	163	773	0	29	71	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	645	68	163	773	0	29	71	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	645	68	163	773	0	29	71	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	645	68	163	773	0	29	71	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	0.48	1.17	0.35	0.00	0.00	0.00
Final Sat.:	0	2895	305	1600	3200	0	767	1878	555	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.10	0.24	0.00	0.04	0.04	0.04	0.00	0.00	0.00
Crit Moves:		****		****					****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	585	357	65	533	150	128	749	34	265	1049	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	585	357	65	533	150	128	749	34	265	1049	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	585	357	65	533	150	128	749	34	265	1049	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	585	357	65	533	150	128	749	34	265	1049	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.56	0.44	1.00	2.87	0.13	2.00	2.82	0.18
Final Sat.:	1600	3200	1600	1600	2497	703	1600	4592	208	2880	4508	292
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.22	0.04	0.21	0.21	0.08	0.16	0.16	0.09	0.23	0.23
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	181	780	188	339	772	376	181	129	311	101	20	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	780	188	339	772	376	181	129	311	101	20	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	780	188	339	772	376	181	129	311	101	20	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	780	188	339	772	376	181	129	311	101	20	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	780	188	339	772	376	181	129	311	101	20	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.02	0.98	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	2880	4800	1600	1600	3228	1572	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	136	787	216	379	822	78	85	505	81	118	421	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	787	216	379	822	78	85	505	81	118	421	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	787	216	379	822	78	85	505	81	118	421	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	787	216	379	822	78	85	505	81	118	421	221
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	787	216	379	822	78	85	505	81	118	421	221
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.59	0.41	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4384	416	1600	4137	663	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.14	0.13	0.19	0.19	0.05	0.12	0.12	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	947	484	289	752	0	0	0	0	253	0	271
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	947	484	289	752	0	0	0	0	253	0	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	947	484	289	752	0	0	0	0	253	0	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	947	484	289	752	0	0	0	0	253	0	271
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	947	484	289	752	0	0	0	0	253	0	271
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.10	0.16	0.00	0.00	0.00	0.00	0.08	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	1003	134	208	725	320	361	549	97	184	873	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	1003	134	208	725	320	361	549	97	184	873	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1003	134	208	725	320	361	549	97	184	873	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	1003	134	208	725	320	361	549	97	184	873	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.55	0.45	1.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	1600	4079	721	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.08	0.07	0.15	0.20	0.23	0.13	0.13	0.12	0.27	0.08
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1105	139	0	610	355	503	32	588	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1105	139	0	610	355	503	32	588	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1105	139	0	610	355	503	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1105	139	0	610	355	503	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1105	139	0	610	355	503	32	0	0	0	0
OvlAdjVol:						76						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2842	358	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.17	0.01	0.00	0.00	0.00	0.00
OvlAdjV/S:						0.05						
Crit Moves:		****			****			****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	114	418	138	163	471	277	32	302	76	156	419	228
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	418	138	163	471	277	32	302	76	156	419	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	418	138	163	471	277	32	302	76	156	419	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	418	138	163	471	277	32	302	76	156	419	228
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	418	138	163	471	277	32	302	76	156	419	228
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.26	0.74	1.00	2.00	1.00	1.00	1.30	0.70
Final Sat.:	1600	2406	794	1600	2015	1185	1600	3200	1600	1600	2072	1128
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.23	0.23	0.02	0.09	0.05	0.10	0.20	0.20
Crit Moves:			****		****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	129	471	117	62	458	95	68	416	141	184	534	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	471	117	62	458	95	68	416	141	184	534	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	471	117	62	458	95	68	416	141	184	534	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	471	117	62	458	95	68	416	141	184	534	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	471	117	62	458	95	68	416	141	184	534	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2650	550	1600	3200	1600	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.07	0.04	0.17	0.17	0.04	0.13	0.09	0.12	0.20	0.20
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	3 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	281	0	740	0	765	0	0	619	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	740	0	765	0	0	619	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	740	0	765	0	0	619	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	740	0	765	0	0	619	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	740	0	765	0	0	619	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	4800	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.46	0.00	0.16	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	58	130	157	50	63	14	37	293	80	418	737	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	130	157	50	63	14	37	293	80	418	737	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	130	157	50	63	14	37	293	80	418	737	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	130	157	50	63	14	37	293	80	418	737	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	130	157	50	63	14	37	293	80	418	737	352
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2618	582	1600	2514	686	1600	2166	1034
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:	****			****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	79	110	372	95	0	0	0	0	773	0	325
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	79	110	372	95	0	0	0	0	773	0	325
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	79	110	372	95	0	0	0	0	773	0	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	79	110	372	95	0	0	0	0	773	0	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	79	110	372	95	0	0	0	0	773	0	325
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.59	0.41	0.00	0.00	0.00	0.00	1.41	0.00	0.59
Final Sat.:	0	1600	1600	2549	651	0	0	0	0	2253	0	947
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.07	0.15	0.15	0.00	0.00	0.00	0.00	0.34	0.00	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****						****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	372	95	773	325
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	372	95	773	325
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	93	24	193	81
Total Analysis Volume [veh/h]	79	110	372	95	773	325
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	62	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	33	33	33	33	33	33
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	11	11	14	14
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.07	0.14	0.23	0.31	0.33
s, saturation flow rate [veh/h]	1870	1589	1320	1217	1781	1662
c, Capacity [veh/h]	608	517	524	578	768	717
d1, Uniform Delay [s]	7.81	8.04	11.30	10.44	7.67	7.93
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	0.20	0.40	0.64	1.25	1.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.21	0.35	0.49	0.71	0.77
d, Delay for Lane Group [s/veh]	7.91	8.24	11.70	11.09	8.93	9.67
Lane Group LOS	A	A	B	B	A	A
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.29	0.42	0.95	1.43	2.08	2.22
50th-Percentile Queue Length [ft]	7.19	10.45	23.76	35.71	52.12	55.59
95th-Percentile Queue Length [veh]	0.52	0.75	1.71	2.57	3.75	4.00
95th-Percentile Queue Length [ft]	12.94	18.81	42.76	64.28	93.82	100.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	7.91	8.24	11.41	11.09	9.14	9.67
Movement LOS	A	A	B	B	A	A
d_A, Approach Delay [s/veh]	8.10		11.33		9.30	
Approach LOS	A		B		A	
d_I, Intersection Delay [s/veh]	9.71					
Intersection LOS	A					
Intersection V/C	0.562					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	4.444	4.903	5.944
Bicycle LOS	E	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	193	641	378	50	347	349	56	381	77	172	891	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	641	378	50	347	349	56	381	77	172	891	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	641	378	50	347	349	56	381	77	172	891	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	641	378	50	347	349	56	381	77	172	891	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	641	378	50	347	349	56	381	77	172	891	97
OvlAdjVol:			282			293						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.50	0.50	2.00	1.80	0.20
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	3993	807	2880	2886	314
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.24	0.03	0.11	0.22	0.04	0.10	0.10	0.06	0.31	0.31
OvlAdjV/S:			0.18			0.18						
Crit Moves:	****					****	****				****	

Future with Project with Mitigation Conditions (County of Los Angeles) 2020 Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.712
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1	0 1	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 1
Volume Module:												
Base Vol:	2	538	318	487	686	0	0	0	3	181	0	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	538	318	487	686	0	0	0	3	181	0	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	538	318	487	686	0	0	0	3	181	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	538	318	487	686	0	0	0	3	181	0	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	538	318	487	686	0	0	0	3	181	0	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.99	1.00	1.00	2.00	0.00	0.00	0.00	1.00	1.04	xxxx	1.96
Final Sat.:	12	3188	1600	1600	3200	0	0	0	1600	1668	0	3132
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.20	0.30	0.21	0.00	0.00	0.00	0.00	0.11	0.00	0.11
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	700	149	315	1135	0	61	276	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	700	149	315	1135	0	61	276	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	700	149	315	1135	0	61	276	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	700	149	315	1135	0	61	276	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	0.32	1.46	0.22	0.00	0.00	0.00
Final Sat.:	0	2638	562	1600	3200	0	515	2330	355	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.35	0.00	0.12	0.12	0.12	0.00	0.00	0.00
Crit Moves:		****		****					****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.893
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	97	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	491	414	153	867	186	230	1407	102	358	1003	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	491	414	153	867	186	230	1407	102	358	1003	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	491	414	153	867	186	230	1407	102	358	1003	116
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	2.80	0.20	2.00	2.69	0.31
Final Sat.:	1600	3200	1600	1600	2635	565	1600	4476	324	2880	4302	498
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.26	0.10	0.33	0.33	0.14	0.31	0.31	0.12	0.23	0.23
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	243	1003	210	261	1063	263	287	797	586	150	21	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1003	210	261	1063	263	287	797	586	150	21	189
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	243	1003	210	261	1063	263	287	797	586	150	21	189
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	2880	4800	1600	1600	3848	952	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.13	0.16	0.28	0.28	0.18	0.29	0.29	0.09	0.01	0.06
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	997	255	427	1199	85	114	662	158	218	712	353
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	997	255	427	1199	85	114	662	158	218	712	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	997	255	427	1199	85	114	662	158	218	712	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	997	255	427	1199	85	114	662	158	218	712	353
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.42	0.58	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4482	318	1600	3875	925	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.16	0.15	0.27	0.27	0.07	0.17	0.17	0.14	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	2 0	0 0	1
Volume Module:												
Base Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1165	353	351	1300	0	0	0	0	496	0	233
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1165	353	351	1300	0	0	0	0	496	0	233
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1165	353	351	1300	0	0	0	0	496	0	233
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.27	0.00	0.00	0.00	0.00	0.16	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	1169	179	330	1122	426	346	998	243	253	652	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	1169	179	330	1122	426	346	998	243	253	652	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	1169	179	330	1122	426	346	998	243	253	652	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.41	0.59	1.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	1600	3860	940	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.11	0.11	0.23	0.27	0.22	0.26	0.26	0.16	0.20	0.12
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1161	184	0	1172	533	348	224	454	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1161	184	0	1172	533	348	224	454	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1161	184	0	1172	533	348	224	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1161	184	0	1172	533	348	224	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1161	184	0	1172	533	348	224	0	0	0	0
OvlAdjVol:						340						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2762	438	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.33	0.12	0.07	0.00	0.00	0.00	0.00
OvlAdjV/S:						0.21						
Crit Moves:		****			****			****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	109	496	153	223	678	170	58	648	150	176	247	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	496	153	223	678	170	58	648	150	176	247	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	496	153	223	678	170	58	648	150	176	247	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	496	153	223	678	170	58	648	150	176	247	236
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	496	153	223	678	170	58	648	150	176	247	236
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.60	0.40	1.00	2.00	1.00	1.00	1.02	0.98
Final Sat.:	1600	2446	754	1600	2558	642	1600	3200	1600	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.14	0.26	0.27	0.04	0.20	0.09	0.11	0.15	0.15
Crit Moves:			****			****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1	1 0	1 1	0
Volume Module:												
Base Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	450	161	163	728	86	81	1004	215	127	638	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	450	161	163	728	86	81	1004	215	127	638	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	450	161	163	728	86	81	1004	215	127	638	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	450	161	163	728	86	81	1004	215	127	638	136
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	2.00	1.00	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2862	338	1600	3200	1600	1600	2638	562
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.10	0.10	0.25	0.25	0.05	0.31	0.13	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	3 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	394	0	466	0	1430	0	0	749	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	394	0	466	0	1430	0	0	749	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	394	0	466	0	1430	0	0	749	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	394	0	466	0	1430	0	0	749	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	4800	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.29	0.00	0.30	0.00	0.00	0.16	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Prot+Permit		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	24	34	282	292	315	62	13	641	197	366	502	97
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	282	292	315	62	13	641	197	366	502	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	282	292	315	62	13	641	197	366	502	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	282	292	315	62	13	641	197	366	502	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	282	292	315	62	13	641	197	366	502	97
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.68	0.32
Final Sat.:	1600	1600	1600	1600	2674	526	1600	2448	752	1600	2682	518
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.23	0.19	0.19
OvlAdjV/S:			0.00									
Crit Moves:	****			****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #25 Hamilton Ave & I-110 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	0 1	1 1	0	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	61	534	733	169	0	0	0	0	331	0	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	61	534	733	169	0	0	0	0	331	0	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	61	534	733	169	0	0	0	0	331	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	61	534	733	169	0	0	0	0	331	0	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	61	534	733	169	0	0	0	0	331	0	260
OvlAdjVol:			238									
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	1.63	0.37	0.00	0.00	0.00	0.00	1.12	0.00	0.88
Final Sat.:	0	1600	1600	2600	600	0	0	0	0	1792	0	1408
Capacity Analysis Module:												
Vol/Sat:	0.00	0.04	0.33	0.28	0.28	0.00	0.00	0.00	0.00	0.18	0.00	0.18
OvlAdjV/S:			0.15									
Crit Moves:			****		****					****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	733	169	331	260
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	733	169	331	260
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	183	42	83	65
Total Analysis Volume [veh/h]	61	534	733	169	331	260
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Permissive	Permissive
Signal group	4	0	0	8	6	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	57	33	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C
C, Cycle Length [s]	32	32	32	32	32	32
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	8	8
g / C, Green / Cycle	0.48	0.48	0.48	0.48	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.34	0.30	0.38	0.17	0.18
s, saturation flow rate [veh/h]	1870	1589	1341	1308	1781	1602
c, Capacity [veh/h]	905	769	757	823	468	421
d1, Uniform Delay [s]	4.35	6.33	8.26	7.65	10.40	10.41
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	1.14	0.58	0.74	1.62	1.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.69	0.53	0.61	0.66	0.67
d, Delay for Lane Group [s/veh]	4.38	7.47	8.84	8.39	12.02	12.24
Lane Group LOS	A	A	A	A	B	B
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	0.11	1.58	1.52	1.81	1.57	1.44
50th-Percentile Queue Length [ft]	2.81	39.42	37.94	45.14	39.14	35.97
95th-Percentile Queue Length [veh]	0.20	2.84	2.73	3.25	2.82	2.59
95th-Percentile Queue Length [ft]	5.06	70.96	68.28	81.26	70.45	64.74

Movement, Approach, & Intersection Results

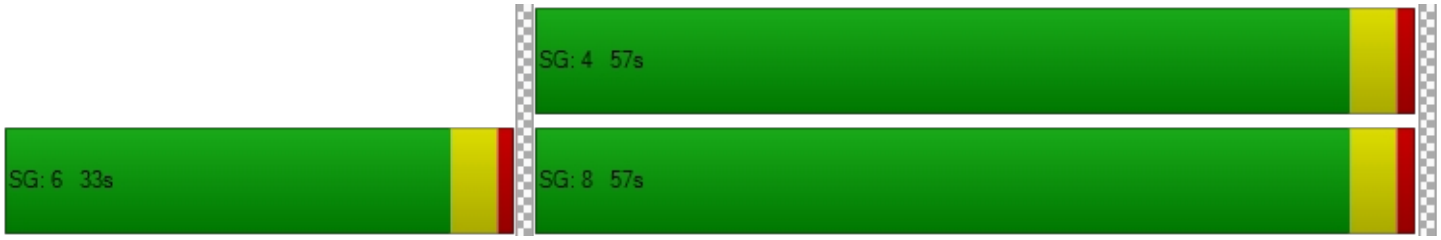
d_M, Delay for Movement [s/veh]	4.38	7.47	8.64	8.39	12.04	12.24
Movement LOS	A	A	A	A	B	B
d_A, Approach Delay [s/veh]	7.15		8.59		12.12	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.18					
Intersection LOS	A					
Intersection V/C	0.559					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000
Crosswalk LOS	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
l_b,int, Bicycle LOS Score for Intersection	5.114	5.621	5.108
Bicycle LOS	F	F	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.715
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	407	410	185	693	206	68	1033	132	348	693	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	407	410	185	693	206	68	1033	132	348	693	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	407	410	185	693	206	68	1033	132	348	693	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	407	410	185	693	206	68	1033	132	348	693	87
OvlAdjVol:			217			138						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.66	0.34	2.00	1.78	0.22
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	4256	544	2880	2843	357
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.26	0.12	0.22	0.13	0.04	0.24	0.24	0.12	0.24	0.24
OvlAdjV/S:			0.14			0.09						
Crit Moves:			****	****				****		****		

Future with Project with Mitigation Conditions (County of Los Angeles) 2020 Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	0 1	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 1
Volume Module:												
Base Vol:	0	301	239	448	312	0	0	0	0	197	0	434
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	301	239	448	312	0	0	0	0	197	0	434
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	301	239	448	312	0	0	0	0	197	0	434
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	301	239	448	312	0	0	0	0	197	0	434
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	301	239	448	312	0	0	0	0	197	0	434
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00
Final Sat.:	0	3200	1600	1600	3200	0	0	1600	0	1600	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.15	0.28	0.10	0.00	0.00	0.00	0.00	0.12	0.00	0.14
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.452
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 1	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	435	247	166	698	0	19	77	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	435	247	166	698	0	19	77	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	435	247	166	698	0	19	77	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	435	247	166	698	0	19	77	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	435	247	166	698	0	19	77	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.28	0.72	1.00	2.00	0.00	0.34	1.39	0.27	0.00	0.00	0.00
Final Sat.:	0	2041	1159	1600	3200	0	548	2220	432	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.22	0.00	0.03	0.03	0.03	0.00	0.00	0.00
Crit Moves:		****		****					****			

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	3 0	1	1 0	2 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	327	1109	160	304	1004	426	472	498	269	239	461	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	327	1109	160	304	1004	426	472	498	269	239	461	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	327	1109	160	304	1004	426	472	498	269	239	461	194
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2880	4800	1600	2880	4800	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.23	0.10	0.11	0.21	0.27	0.30	0.16	0.17	0.15	0.14	0.12
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.912
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	278	1186	177	0	1032	838	909	273	679	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1186	177	0	1032	838	909	273	679	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1186	177	0	1032	838	909	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1186	177	0	1032	838	909	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1186	177	0	1032	838	909	273	0	0	0	0
OvlAdjVol:						333						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2784	416	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.32	0.52	0.32	0.09	0.00	0.00	0.00	0.00
OvlAdjV/S:						0.21						
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.580
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	50	364	130	161	399	73	36	312	50	129	183	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	364	130	161	399	73	36	312	50	129	183	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	364	130	161	399	73	36	312	50	129	183	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	364	130	161	399	73	36	312	50	129	183	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	364	130	161	399	73	36	312	50	129	183	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.69	0.31	1.00	2.00	1.00	1.00	1.10	0.90
Final Sat.:	1600	2358	842	1600	2705	495	1600	3200	1600	1600	1753	1447
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.10	0.15	0.15	0.02	0.10	0.03	0.08	0.10	0.10
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	3 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	354	0	360	0	1019	0	0	580	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	354	0	360	0	1019	0	0	580	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	354	0	360	0	1019	0	0	580	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	354	0	360	0	1019	0	0	580	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	4800	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.23	0.00	0.21	0.00	0.00	0.12	0.00
Crit Moves:				****				****		****		

Future Base Conditions
(City of Carson) 2020
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	478	160	224	555	0	1	0	3	176	0	224
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	478	160	224	555	0	1	0	3	176	0	224
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	478	160	224	555	0	1	0	3	176	0	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	478	160	224	555	0	1	0	3	176	0	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	478	160	224	555	0	1	0	3	176	0	224
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.49	0.50	1.00	2.00	0.00	0.25	0.00	0.75	1.00	0.00	1.00
Final Sat.:	20	2383	798	1600	3200	0	400	0	1200	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.14	0.17	0.00	0.00	0.00	0.00	0.11	0.00	0.14
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	688	0	0	756	71	0	0	0	107	327	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	688	0	0	756	71	0	0	0	107	327	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	688	0	0	756	71	0	0	0	107	327	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	688	0	0	756	71	0	0	0	107	327	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	688	0	0	756	71	0	0	0	107	327	252
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.31	0.96	0.73
Final Sat.:	1600	3200	0	0	2925	275	0	0	0	499	1525	1176
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.07	0.21	0.21
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	629	69	158	763	0	29	72	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	629	69	158	763	0	29	72	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	629	69	158	763	0	29	72	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	629	69	158	763	0	29	72	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	629	69	158	763	0	29	72	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.80	0.20	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2884	316	1600	3200	0	1600	1239	361	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.10	0.24	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.765
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	74	578	360	65	529	143	118	755	34	267	1058	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	578	360	65	529	143	118	755	34	267	1058	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	578	360	65	529	143	118	755	34	267	1058	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	578	360	65	529	143	118	755	34	267	1058	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	578	360	65	529	143	118	755	34	267	1058	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.23	0.77	1.00	1.57	0.43	1.00	2.87	0.13	1.00	2.82	0.18
Final Sat.:	1600	1972	1228	1600	2519	681	1600	4593	207	1600	4510	290
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.04	0.21	0.21	0.07	0.16	0.16	0.17	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	317	651	7	13	560	258	318	18	184	13	55	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	317	651	7	13	560	258	318	18	184	13	55	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	317	651	7	13	560	258	318	18	184	13	55	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	651	7	13	560	258	318	18	184	13	55	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	317	651	7	13	560	258	318	18	184	13	55	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.95	0.05	1.00	0.13	0.55	0.32
Final Sat.:	2880	3166	34	1600	3200	1600	1514	86	1600	208	880	512
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.01	0.17	0.16	0.21	0.21	0.12	0.06	0.06	0.06
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.572
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	971	168	179	1156	0	0	0	0	389	0	606
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	971	168	179	1156	0	0	0	0	389	0	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	971	168	179	1156	0	0	0	0	389	0	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	971	168	179	1156	0	0	0	0	389	0	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	971	168	179	1156	0	0	0	0	389	0	606
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.01	1.82
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1877	0	2923
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.06	0.24	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.664
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	183	778	187	342	772	380	183	130	314	96	20	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	778	187	342	772	380	183	130	314	96	20	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	778	187	342	772	380	183	130	314	96	20	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	778	187	342	772	380	183	130	314	96	20	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	778	187	342	772	380	183	130	314	96	20	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.01	0.99	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3217	1583	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	137	783	215	383	815	79	86	510	82	115	425	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	137	783	215	383	815	79	86	510	82	115	425	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	783	215	383	815	79	86	510	82	115	425	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	783	215	383	815	79	86	510	82	115	425	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	783	215	383	815	79	86	510	82	115	425	223
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4376	424	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.13	0.13	0.19	0.19	0.05	0.16	0.05	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.416
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	1080	63	37	978	8	58	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	1080	63	37	978	8	58	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	1080	63	37	978	8	58	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	1080	63	37	978	8	58	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	1080	63	37	978	8	58	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.98	0.02	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4761	39	901	0	699	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.04	0.02	0.21	0.21	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****			****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	940	486	292	740	0	0	0	0	252	0	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	486	292	740	0	0	0	0	252	0	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	940	486	292	740	0	0	0	0	252	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	940	486	292	740	0	0	0	0	252	0	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	940	486	292	740	0	0	0	0	252	0	274
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.10	0.15	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.445
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	119	1322	0	0	874	104	111	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	119	1322	0	0	874	104	111	0	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	1322	0	0	874	104	111	0	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1322	0	0	874	104	111	0	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	1322	0	0	874	104	111	0	63	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4290	510	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.28	0.00	0.00	0.20	0.20	0.07	0.00	0.04	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.489
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1388	68	34	910	0	0	0	0	103	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1388	68	34	910	0	0	0	0	103	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1388	68	34	910	0	0	0	0	103	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1388	68	34	910	0	0	0	0	103	0	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1388	68	34	910	0	0	0	0	103	0	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4576	224	1600	4800	0	1600	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.02	0.19	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	217	1343	115	69	872	97	65	9	137	162	13	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1343	115	69	872	97	65	9	137	162	13	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1343	115	69	872	97	65	9	137	162	13	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1343	115	69	872	97	65	9	137	162	13	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1343	115	69	872	97	65	9	137	162	13	103
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.76	0.24	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	2880	4421	379	1600	4800	1600	1600	1600	1600	1600	179	1421
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.30	0.04	0.18	0.06	0.04	0.01	0.09	0.10	0.07	0.07
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.922
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	161	1006	135	207	727	322	364	554	98	186	881	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1006	135	207	727	322	364	554	98	186	881	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1006	135	207	727	322	364	554	98	186	881	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1006	135	207	727	322	364	554	98	186	881	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1006	135	207	727	322	364	554	98	186	881	124
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.08	0.92	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3327	1473	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.08	0.07	0.22	0.22	0.23	0.17	0.06	0.12	0.28	0.08
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.514
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	475	1219	0	0	862	289	0	0	0	106	0	506
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	475	1219	0	0	862	289	0	0	0	106	0	506
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	475	1219	0	0	862	0	0	0	0	106	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	475	1219	0	0	862	0	0	0	0	106	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	475	1219	0	0	862	0	0	0	0	106	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.38	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1115	140	0	616	355	505	32	594	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1115	140	0	616	355	505	32	594	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1115	140	0	616	355	505	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1115	140	0	616	355	505	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1115	140	0	616	355	505	32	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2843	357	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.18	0.01	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	565	110	66	528	0	0	0	0	483	0	409
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	565	110	66	528	0	0	0	0	483	0	409
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	565	110	66	528	0	0	0	0	483	0	409
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	565	110	66	528	0	0	0	0	483	0	409
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	565	110	66	528	0	0	0	0	483	0	409
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2679	521	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.04	0.17	0.00	0.00	0.00	0.00	0.30	0.00	0.26
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	112	405	137	165	463	280	32	305	74	143	423	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	112	405	137	165	463	280	32	305	74	143	423	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	112	405	137	165	463	280	32	305	74	143	423	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	405	137	165	463	280	32	305	74	143	423	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	112	405	137	165	463	280	32	305	74	143	423	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.49	0.51	1.00	1.25	0.75	1.00	1.61	0.39	1.00	1.30	0.70
Final Sat.:	1600	2391	809	1600	1994	1206	1600	2575	625	1600	2073	1127
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.10	0.23	0.23	0.02	0.12	0.12	0.09	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	118	453	118	63	433	96	69	420	125	186	539	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	453	118	63	433	96	69	420	125	186	539	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	453	118	63	433	96	69	420	125	186	539	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	453	118	63	433	96	69	420	125	186	539	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	453	118	63	433	96	69	420	125	186	539	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	1.54	0.46	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2619	581	1600	2466	734	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.07	0.14	0.07	0.04	0.17	0.17	0.04	0.17	0.17	0.12	0.21	0.21
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1	1 0	1	1 0
Volume Module:												
Base Vol:	153	575	90	49	404	121	153	558	145	61	571	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	575	90	49	404	121	153	558	145	61	571	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	575	90	49	404	121	153	558	145	61	571	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	575	90	49	404	121	153	558	145	61	571	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	575	90	49	404	121	153	558	145	61	571	77
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2820	380
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.21	0.03	0.13	0.08	0.10	0.17	0.09	0.04	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.385
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	164	913	0	0	592	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	164	913	0	0	592	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	164	913	0	0	592	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	164	913	0	0	592	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	164	913	0	0	592	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.00	0.00	0.19	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	278	0	747	0	761	0	0	617	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	278	0	747	0	761	0	0	617	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	278	0	747	0	761	0	0	617	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	0	747	0	761	0	0	617	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	278	0	747	0	761	0	0	617	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.47	0.00	0.24	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	132	537	23	196	744	680	223	217	132	23	297	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	537	23	196	744	680	223	217	132	23	297	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	537	23	196	744	680	223	217	132	23	297	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	537	23	196	744	680	223	217	132	23	297	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	537	23	196	744	680	223	217	132	23	297	118
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.24	0.76	1.00	1.43	0.57
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	1990	1210	1600	2290	910
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.43	0.08	0.11	0.11	0.01	0.13	0.13
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	59	131	158	51	64	14	37	293	81	416	741	356
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	131	158	51	64	14	37	293	81	416	741	356
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	131	158	51	64	14	37	293	81	416	741	356
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	131	158	51	64	14	37	293	81	416	741	356
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	131	158	51	64	14	37	293	81	416	741	356
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2626	574	1600	2507	693	1600	2162	1038
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	59.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.103

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	369	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	369	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	92	24	195	82
Total Analysis Volume [veh/h]	80	111	369	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	458	502	455	486	554	558
Degree of Utilization, x	0.17	0.22	0.81	0.20	1.10	0.99

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.56	0.73	17.99	14.19
95th-Percentile Queue Length [ft]	15.67	20.93	189.01	18.22	449.70	354.72
Approach Delay [s/veh]	12.03		31.53		79.14	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	59.33					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	195	647	374	51	350	352	57	381	78	173	891	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	647	374	51	350	352	57	381	78	173	891	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	647	374	51	350	352	57	381	78	173	891	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	647	374	51	350	352	57	381	78	173	891	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	647	374	51	350	352	57	381	78	173	891	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2656	544	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.23	0.03	0.11	0.22	0.04	0.14	0.14	0.11	0.28	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	692	605	0	0	415	194	605	0	225	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	692	605	0	0	415	194	605	0	225	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	692	605	0	0	415	194	605	0	225	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	692	605	0	0	415	194	605	0	225	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	692	605	0	0	415	194	605	0	225	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2333	0	867	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.19	0.00	0.00	0.13	0.12	0.26	0.00	0.26	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	281	0	255	282	331	0	0	500	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	255	282	331	0	0	500	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	255	282	331	0	0	500	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	255	282	331	0	0	500	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	255	282	331	0	0	500	89
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2716	484
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.16	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	272	716	712	5	0	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	272	716	712	5	0	186
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	179	178	1	0	47
Total Analysis Volume [veh/h]	272	716	712	5	0	186
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.69	0.80	0.44	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.76	11.67	7.84	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.50	1.94	0.84	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	37.46	48.51	20.96	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.62		7.79		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	10.07					
Intersection LOS	C					

Future Base Conditions
(City of Carson) 2020
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.791
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	543	281	418	693	0	0	0	3	141	0	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	543	281	418	693	0	0	0	3	141	0	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	543	281	418	693	0	0	0	3	141	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	543	281	418	693	0	0	0	3	141	0	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	543	281	418	693	0	0	0	3	141	0	274
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.31	0.68	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	8	2104	1089	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.26	0.22	0.00	0.00	0.00	0.00	0.09	0.00	0.17
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	713	0	0	1320	93	0	0	0	102	122	269
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	713	0	0	1320	93	0	0	0	102	122	269
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	713	0	0	1320	93	0	0	0	102	122	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	713	0	0	1320	93	0	0	0	102	122	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	713	0	0	1320	93	0	0	0	102	122	269
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.41	0.59	1.00
Final Sat.:	1600	3200	0	0	2989	211	0	0	0	662	938	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.06	0.13	0.17
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	677	150	308	1115	0	62	279	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	677	150	308	1115	0	62	279	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	677	150	308	1115	0	62	279	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	677	150	308	1115	0	62	279	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	677	150	308	1115	0	62	279	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.64	0.36	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2620	580	1600	3200	0	1600	1391	209	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.19	0.35	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.016
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	481	414	154	859	173	218	1408	103	360	1005	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	481	414	154	859	173	218	1408	103	360	1005	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	481	414	154	859	173	218	1408	103	360	1005	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	481	414	154	859	173	218	1408	103	360	1005	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	481	414	154	859	173	218	1408	103	360	1005	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.07	0.93	1.00	1.66	0.34	1.00	2.80	0.20	1.00	2.69	0.31
Final Sat.:	1600	1720	1480	1600	2664	536	1600	4473	327	1600	4299	501
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.10	0.32	0.32	0.14	0.31	0.31	0.23	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	191	470	11	38	881	361	435	58	488	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	470	11	38	881	361	435	58	488	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	470	11	38	881	361	435	58	488	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	470	11	38	881	361	435	58	488	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	470	11	38	881	361	435	58	488	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.95	0.05	1.00	2.00	1.00	0.88	0.12	1.00	0.12	0.34	0.54
Final Sat.:	2880	3127	73	1600	3200	1600	1412	188	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.02	0.28	0.23	0.31	0.31	0.31	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1262	230	165	1161	0	0	0	0	421	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1262	230	165	1161	0	0	0	0	421	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1262	230	165	1161	0	0	0	0	421	0	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1262	230	165	1161	0	0	0	0	421	0	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1262	230	165	1161	0	0	0	0	421	0	453
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.45	xxxx	1.55
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2312	0	2488
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.14	0.06	0.24	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.895
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	245	987	204	264	1054	266	290	805	592	122	21	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	245	987	204	264	1054	266	290	805	592	122	21	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	245	987	204	264	1054	266	290	805	592	122	21	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	987	204	264	1054	266	290	805	592	122	21	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	987	204	264	1054	266	290	805	592	122	21	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3833	967	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.21	0.13	0.17	0.28	0.27	0.18	0.29	0.29	0.08	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	150	973	249	431	1162	86	115	668	143	210	719	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	973	249	431	1162	86	115	668	143	210	719	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	973	249	431	1162	86	115	668	143	210	719	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	973	249	431	1162	86	115	668	143	210	719	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	973	249	431	1162	86	115	668	143	210	719	357
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.79	0.21	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4469	331	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.16	0.15	0.26	0.26	0.07	0.21	0.09	0.13	0.22	0.22
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.512
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1248	39	56	1433	33	74	0	30	51	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1248	39	56	1433	33	74	0	30	51	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1248	39	56	1433	33	74	0	30	51	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1248	39	56	1433	33	74	0	30	51	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1248	39	56	1433	33	74	0	30	51	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	0.71	0.00	0.29	1.55	0.00	1.45
Final Sat.:	1600	4800	1600	1600	4692	108	1138	0	462	2473	0	2327
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.02	0.04	0.31	0.31	0.06	0.00	0.07	0.02	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1128	350	355	1237	0	0	0	0	494	0	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1128	350	355	1237	0	0	0	0	494	0	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1128	350	355	1237	0	0	0	0	494	0	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1128	350	355	1237	0	0	0	0	494	0	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1128	350	355	1237	0	0	0	0	494	0	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.26	0.00	0.00	0.00	0.00	0.31	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	91	1255	0	0	1636	93	208	0	173	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	91	1255	0	0	1636	93	208	0	173	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	1255	0	0	1636	93	208	0	173	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	1255	0	0	1636	93	208	0	173	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	1255	0	0	1636	93	208	0	173	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.84	0.16	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4542	258	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.00	0.00	0.36	0.36	0.13	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1321	73	60	1748	0	0	0	0	35	0	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1321	73	60	1748	0	0	0	0	35	0	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1321	73	60	1748	0	0	0	0	35	0	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1321	73	60	1748	0	0	0	0	35	0	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1321	73	60	1748	0	0	0	0	35	0	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	3.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4549	251	1600	4800	0	1600	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.04	0.36	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.670
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	222	1334	195	104	1704	92	64	14	135	85	16	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	1334	195	104	1704	92	64	14	135	85	16	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	1334	195	104	1704	92	64	14	135	85	16	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1334	195	104	1704	92	64	14	135	85	16	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	1334	195	104	1704	92	64	14	135	85	16	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	2880	4188	612	1600	4800	1600	1600	1600	1600	1600	332	1268
Capacity Analysis Module:												
Vol/Sat:	0.08	0.32	0.32	0.07	0.36	0.06	0.04	0.01	0.08	0.05	0.05	0.05
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.003
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	172	1151	181	325	1114	423	334	1008	245	256	658	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	1151	181	325	1114	423	334	1008	245	256	658	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	1151	181	325	1114	423	334	1008	245	256	658	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1151	181	325	1114	423	334	1008	245	256	658	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	1151	181	325	1114	423	334	1008	245	256	658	183
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.17	0.83	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3479	1321	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.11	0.11	0.32	0.32	0.21	0.32	0.15	0.16	0.21	0.11
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	348	1197	0	0	1516	535	0	0	0	186	2	502
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	1197	0	0	1516	535	0	0	0	186	2	502
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	348	1197	0	0	1516	0	0	0	0	186	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	1197	0	0	1516	0	0	0	0	186	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	348	1197	0	0	1516	0	0	0	0	186	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.98	0.02	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3166	34	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.37	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.642
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1164	186	0	1179	528	345	226	457	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1164	186	0	1179	528	345	226	457	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1164	186	0	1179	528	345	226	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1164	186	0	1179	528	345	226	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1164	186	0	1179	528	345	226	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2759	441	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.33	0.12	0.07	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	1	630	137	109	787	0	0	0	0	255	0	329
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	630	137	109	787	0	0	0	0	255	0	329
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	630	137	109	787	0	0	0	0	255	0	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	630	137	109	787	0	0	0	0	255	0	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	630	137	109	787	0	0	0	0	255	0	329
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2628	572	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.07	0.25	0.00	0.00	0.00	0.00	0.16	0.00	0.21
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	104	465	150	225	664	172	59	654	144	154	249	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	465	150	225	664	172	59	654	144	154	249	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	465	150	225	664	172	59	654	144	154	249	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	465	150	225	664	172	59	654	144	154	249	238
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	465	150	225	664	172	59	654	144	154	249	238
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	1.59	0.41	1.00	1.64	0.36	1.00	1.02	0.98
Final Sat.:	1600	2420	780	1600	2542	658	1600	2623	577	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.19	0.19	0.14	0.26	0.26	0.04	0.25	0.25	0.10	0.15	0.15
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	169	408	163	165	684	87	82	998	195	128	637	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	408	163	165	684	87	82	998	195	128	637	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	408	163	165	684	87	82	998	195	128	637	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	408	163	165	684	87	82	998	195	128	637	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	408	163	165	684	87	82	998	195	128	637	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.77	0.23	1.00	1.67	0.33	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2839	361	1600	2677	523	1600	2634	566
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.10	0.10	0.24	0.24	0.05	0.37	0.37	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	106	505	145	75	722	108	115	989	221	68	812	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	505	145	75	722	108	115	989	221	68	812	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	505	145	75	722	108	115	989	221	68	812	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	505	145	75	722	108	115	989	221	68	812	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	505	145	75	722	108	115	989	221	68	812	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	1600	2486	714	1600	3200	1600	1600	3200	1600	1600	2887	313
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.05	0.23	0.07	0.07	0.31	0.14	0.04	0.28	0.28
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	459	1336	0	0	743	327
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	459	1336	0	0	743	327
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	459	1336	0	0	743	327
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	459	1336	0	0	743	327
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	459	1336	0	0	743	327
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.42	0.00	0.00	0.23	0.20
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	385	0	471	0	1419	0	0	737	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	385	0	471	0	1419	0	0	737	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	385	0	471	0	1419	0	0	737	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	385	0	471	0	1419	0	0	737	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	385	0	471	0	1419	0	0	737	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.29	0.00	0.44	0.00	0.00	0.15	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.760
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	153	538	35	176	662	339	509	712	217	18	367	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	538	35	176	662	339	509	712	217	18	367	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	538	35	176	662	339	509	712	217	18	367	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	538	35	176	662	339	509	712	217	18	367	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	538	35	176	662	339	509	712	217	18	367	213
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.53	0.47	1.00	1.27	0.73
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2453	747	1600	2025	1175
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.02	0.06	0.21	0.21	0.18	0.29	0.29	0.01	0.18	0.18
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	129	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	283	295	318	63	13	640	199	355	500	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	283	295	318	63	13	640	199	355	500	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	283	295	318	63	13	640	199	355	500	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	283	295	318	63	13	640	199	355	500	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	283	295	318	63	13	640	199	355	500	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.67	0.33
Final Sat.:	1600	1600	1600	1600	2671	529	1600	2441	759	1600	2676	524
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.22	0.19	0.19
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	131.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.598

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	725	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	725	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	181	43	84	65
Total Analysis Volume [veh/h]	62	539	725	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	725	484	439	503
Degree of Utilization, x	0.13	1.03	1.60	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	40.61	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1015.32	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		245.08		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	130.97					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.048
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	64	411	396	187	700	208	69	1034	133	350	679	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	411	396	187	700	208	69	1034	133	350	679	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	411	396	187	700	208	69	1034	133	350	679	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	411	396	187	700	208	69	1034	133	350	679	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	411	396	187	700	208	69	1034	133	350	679	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2835	365	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.25	0.12	0.22	0.13	0.04	0.36	0.36	0.22	0.21	0.06
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	508	424	0	0	897	303	447	0	139	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	424	0	0	897	303	447	0	139	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	508	424	0	0	897	303	447	0	139	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	508	424	0	0	897	303	447	0	139	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	508	424	0	0	897	303	447	0	139	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.53	0.00	0.47	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2441	0	759	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.13	0.00	0.00	0.28	0.19	0.18	0.00	0.18	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	430	0	343	227	823	0	0	356	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	430	0	343	227	823	0	0	356	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	430	0	343	227	823	0	0	356	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	430	0	343	227	823	0	0	356	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	430	0	343	227	823	0	0	356	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2719	481
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.21	0.08	0.26	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	217	748	763	18	0	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	748	763	18	0	495
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	187	191	5	0	124
Total Analysis Volume [veh/h]	217	748	763	18	0	495
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.60	0.83	0.47	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.07	11.87	7.90	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.23	2.08	0.92	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	30.74	52.08	22.91	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.49		7.72		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.50					
Intersection LOS	C					

Future Base Conditions
(City of Carson) 2020
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1	0 2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	303	168	341	314	0	0	0	0	143	0	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	303	168	341	314	0	0	0	0	143	0	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	303	168	341	314	0	0	0	0	143	0	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	303	168	341	314	0	0	0	0	143	0	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	303	168	341	314	0	0	0	0	143	0	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.29	0.71	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	2059	1141	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.21	0.10	0.00	0.00	0.00	0.00	0.09	0.00	0.22
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.453
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	395	0	0	556	26	0	0	0	259	93	148
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	395	0	0	556	26	0	0	0	259	93	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	395	0	0	556	26	0	0	0	259	93	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	395	0	0	556	26	0	0	0	259	93	148
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	395	0	0	556	26	0	0	0	259	93	148
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.91	0.09	0.00	0.00	0.00	1.00	0.41	0.59
Final Sat.:	1600	3200	0	0	3057	143	0	0	0	1600	653	947
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.00	0.00	0.18	0.18	0.00	0.00	0.00	0.16	0.14	0.16
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.449
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	398	248	143	671	0	19	78	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	398	248	143	671	0	19	78	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	398	248	143	671	0	19	78	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	398	248	143	671	0	19	78	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	398	248	143	671	0	19	78	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.23	0.77	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	1972	1228	1600	3200	0	1600	1342	258	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.09	0.21	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.466
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	874	274	114	865	0	0	0	0	462	0	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	874	274	114	865	0	0	0	0	462	0	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	874	274	114	865	0	0	0	0	462	0	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	874	274	114	865	0	0	0	0	462	0	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	874	274	114	865	0	0	0	0	462	0	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.17	0.04	0.18	0.00	0.00	0.00	0.00	0.14	0.00	0.14
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.473
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	74	1300	0	0	1232	53	95	0	75	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	1300	0	0	1232	53	95	0	75	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	1300	0	0	1232	53	95	0	75	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1300	0	0	1232	53	95	0	75	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1300	0	0	1232	53	95	0	75	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.88	0.12	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4602	198	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.00	0.00	0.27	0.27	0.06	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1302	53	49	1261	0	0	0	0	41	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1302	53	49	1261	0	0	0	0	41	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1302	53	49	1261	0	0	0	0	41	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1302	53	49	1261	0	0	0	0	41	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1302	53	49	1261	0	0	0	0	41	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	3.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	4612	188	1600	4800	0	1600	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.03	0.26	0.00	0.00	0.00	0.00	0.03	0.00	0.02
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	201	1345	150	39	1323	73	64	19	134	122	18	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	201	1345	150	39	1323	73	64	19	134	122	18	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1345	150	39	1323	73	64	19	134	122	18	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1345	150	39	1323	73	64	19	134	122	18	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1345	150	39	1323	73	64	19	134	122	18	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.70	0.30	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.28	0.72
Final Sat.:	2880	4318	482	1600	4800	1600	1600	1600	1600	1600	450	1150
Capacity Analysis Module:												
Vol/Sat:	0.07	0.31	0.31	0.02	0.28	0.05	0.04	0.01	0.08	0.08	0.04	0.04
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.994
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	329	1009	162	300	928	393	429	502	270	241	464	186
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	329	1009	162	300	928	393	429	502	270	241	464	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	329	1009	162	300	928	393	429	502	270	241	464	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	1009	162	300	928	393	429	502	270	241	464	186
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	329	1009	162	300	928	393	429	502	270	241	464	186
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3372	1428	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.10	0.10	0.28	0.28	0.27	0.16	0.17	0.15	0.15	0.12
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0	0 3	0 1	0	0 0	0 0	1	1 0	0 1
Volume Module:												
Base Vol:	529	1512	0	0	1424	686	0	0	0	427	0	590
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	529	1512	0	0	1424	686	0	0	0	427	0	590
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	529	1512	0	0	1424	0	0	0	0	427	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	529	1512	0	0	1424	0	0	0	0	427	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	529	1512	0	0	1424	0	0	0	0	427	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.47	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.076
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2 0	1	2 0	2 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	278	1183	178	0	1030	796	879	273	683	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1183	178	0	1030	796	879	273	683	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1183	178	0	1030	796	879	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1183	178	0	1030	796	879	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1183	178	0	1030	796	879	273	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2781	419	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.32	0.50	0.31	0.09	0.00	0.00	0.00	0.00
Crit Moves:	****					****	****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.341
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	312	138	35	333	0	0	0	0	126	0	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	312	138	35	333	0	0	0	0	126	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	312	138	35	333	0	0	0	0	126	0	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	312	138	35	333	0	0	0	0	126	0	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	312	138	35	333	0	0	0	0	126	0	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.39	0.61	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2219	981	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.02	0.10	0.00	0.00	0.00	0.00	0.08	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	47	328	124	163	374	74	36	306	46	99	178	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	328	124	163	374	74	36	306	46	99	178	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	328	124	163	374	74	36	306	46	99	178	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	328	124	163	374	74	36	306	46	99	178	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	47	328	124	163	374	74	36	306	46	99	178	152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.45	0.55	1.00	1.67	0.33	1.00	1.74	0.26	1.00	1.08	0.92
Final Sat.:	1600	2322	878	1600	2671	529	1600	2782	418	1600	1726	1474
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.10	0.14	0.14	0.02	0.11	0.11	0.06	0.10	0.10
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	384	814	0	4	517	297
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	384	814	0	4	517	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	384	814	0	4	517	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	384	814	0	4	517	297
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	384	814	0	4	517	297
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.25	0.00	0.00	0.16	0.19
Crit Moves:							****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	329	0	364	0	992	0	0	557	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	329	0	364	0	992	0	0	557	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	329	0	364	0	992	0	0	557	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	329	0	364	0	992	0	0	557	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	329	0	364	0	992	0	0	557	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.23	0.00	0.31	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.442
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	209	0	164	288	266	0	0	287	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	209	0	164	288	266	0	0	287	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	209	0	164	288	266	0	0	287	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	209	0	164	288	266	0	0	287	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	209	0	164	288	266	0	0	287	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.62	0.38
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2587	613
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.10	0.10	0.08	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Future with Project Conditions
(City of Carson) 2020
Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 1!	0 0	1	0 1!	0 0
Volume Module:												
Base Vol:	4	478	190	269	555	0	1	0	3	199	0	259
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	478	190	269	555	0	1	0	3	199	0	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	478	190	269	555	0	1	0	3	199	0	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	478	190	269	555	0	1	0	3	199	0	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	4	478	190	269	555	0	1	0	3	199	0	259
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.42	0.57	1.00	2.00	0.00	0.25	0.00	0.75	1.00	0.00	1.00
Final Sat.:	19	2276	905	1600	3200	0	400	0	1200	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.17	0.17	0.00	0.00	0.00	0.00	0.12	0.00	0.16
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1	1 0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	28	710	0	0	779	71	0	0	0	107	327	259
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	710	0	0	779	71	0	0	0	107	327	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	710	0	0	779	71	0	0	0	107	327	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	710	0	0	779	71	0	0	0	107	327	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	710	0	0	779	71	0	0	0	107	327	259
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.83	0.17	0.00	0.00	0.00	0.31	0.94	0.75
Final Sat.:	1600	3200	0	0	2933	267	0	0	0	494	1510	1196
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.07	0.22	0.22
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	651	69	164	780	0	29	72	21	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	651	69	164	780	0	29	72	21	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	651	69	164	780	0	29	72	21	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	651	69	164	780	0	29	72	21	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	651	69	164	780	0	29	72	21	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	1.00	2.00	0.00	1.00	0.77	0.23	0.00	0.00	0.00
Final Sat.:	0	2893	307	1600	3200	0	1600	1239	361	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.22	0.10	0.24	0.00	0.02	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	74	590	360	65	538	151	129	755	34	267	1058	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	590	360	65	538	151	129	755	34	267	1058	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	590	360	65	538	151	129	755	34	267	1058	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	590	360	65	538	151	129	755	34	267	1058	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	590	360	65	538	151	129	755	34	267	1058	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.56	0.44	1.00	2.87	0.13	1.00	2.82	0.18
Final Sat.:	1600	1987	1213	1600	2499	701	1600	4593	207	1600	4510	290
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.04	0.22	0.22	0.08	0.16	0.16	0.17	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2	0 1	0 1	0	0 1	0 0	1!	0 0
Volume Module:												
Base Vol:	317	659	7	13	567	261	321	18	184	13	55	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	317	659	7	13	567	261	321	18	184	13	55	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	317	659	7	13	567	261	321	18	184	13	55	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	659	7	13	567	261	321	18	184	13	55	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	317	659	7	13	567	261	321	18	184	13	55	32
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.98	0.02	1.00	2.00	1.00	0.95	0.05	1.00	0.13	0.55	0.32
Final Sat.:	2880	3166	34	1600	3200	1600	1515	85	1600	208	880	512
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.01	0.18	0.16	0.21	0.21	0.12	0.06	0.06	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.573
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	974	173	179	1160	0	0	0	0	392	0	606
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	974	173	179	1160	0	0	0	0	392	0	606
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	974	173	179	1160	0	0	0	0	392	0	606
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	974	173	179	1160	0	0	0	0	392	0	606
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	974	173	179	1160	0	0	0	0	392	0	606
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.17	0.01	1.82
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1885	0	2915
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.06	0.24	0.00	0.00	0.00	0.00	0.21	0.00	0.21
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	183	787	190	342	779	380	183	130	314	102	20	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	787	190	342	779	380	183	130	314	102	20	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	787	190	342	779	380	183	130	314	102	20	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	787	190	342	779	380	183	130	314	102	20	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	787	190	342	779	380	183	130	314	102	20	237
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.02	0.98	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3226	1574	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.21	0.24	0.24	0.11	0.08	0.10	0.06	0.01	0.07
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.632
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	137	794	218	383	829	79	86	510	82	119	425	223
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	137	794	218	383	829	79	86	510	82	119	425	223
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	794	218	383	829	79	86	510	82	119	425	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	794	218	383	829	79	86	510	82	119	425	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	794	218	383	829	79	86	510	82	119	425	223
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4382	418	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.14	0.13	0.19	0.19	0.05	0.16	0.05	0.07	0.13	0.14
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	19	1095	63	37	996	8	58	0	45	8	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	1095	63	37	996	8	58	0	45	8	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	1095	63	37	996	8	58	0	45	8	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	1095	63	37	996	8	58	0	45	8	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	1095	63	37	996	8	58	0	45	8	0	11
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.98	0.02	0.56	0.00	0.44	1.26	0.00	1.74
Final Sat.:	1600	4800	1600	1600	4762	38	901	0	699	2021	0	2779
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.04	0.02	0.21	0.21	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:		****		****			****			****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	955	489	292	758	0	0	0	0	255	0	274
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	955	489	292	758	0	0	0	0	255	0	274
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	955	489	292	758	0	0	0	0	255	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	955	489	292	758	0	0	0	0	255	0	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	955	489	292	758	0	0	0	0	255	0	274
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.31	0.10	0.16	0.00	0.00	0.00	0.00	0.16	0.00	0.17
Crit Moves:			****	****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.469
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	130	1323	0	0	874	125	127	0	71	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1323	0	0	874	125	127	0	71	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1323	0	0	874	125	127	0	71	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1323	0	0	874	125	127	0	71	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1323	0	0	874	125	127	0	71	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.62	0.38	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4199	601	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.00	0.00	0.21	0.21	0.08	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.492
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	0	1398	68	35	917	0	1	0	1	103	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1398	68	35	917	0	1	0	1	103	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1398	68	35	917	0	1	0	1	103	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1398	68	35	917	0	1	0	1	103	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1398	68	35	917	0	1	0	1	103	0	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4577	223	1600	4800	0	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.02	0.19	0.00	0.00	0.00	0.00	0.06	0.00	0.03
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	217	1353	115	69	880	97	65	9	137	162	13	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	217	1353	115	69	880	97	65	9	137	162	13	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	1353	115	69	880	97	65	9	137	162	13	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1353	115	69	880	97	65	9	137	162	13	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1353	115	69	880	97	65	9	137	162	13	103
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.76	0.24	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	2880	4424	376	1600	4800	1600	1600	1600	1600	1600	179	1421
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.31	0.04	0.18	0.06	0.04	0.01	0.09	0.10	0.07	0.07
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.923
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	113	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	161	1011	135	210	731	322	364	554	98	186	881	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1011	135	210	731	322	364	554	98	186	881	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1011	135	210	731	322	364	554	98	186	881	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1011	135	210	731	322	364	554	98	186	881	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1011	135	210	731	322	364	554	98	186	881	128
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.08	0.92	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3332	1468	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.08	0.07	0.22	0.22	0.23	0.17	0.06	0.12	0.28	0.08
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	475	1221	0	0	865	291	0	0	0	106	0	509
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	475	1221	0	0	865	291	0	0	0	106	0	509
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	475	1221	0	0	865	0	0	0	0	106	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	475	1221	0	0	865	0	0	0	0	106	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	475	1221	0	0	865	0	0	0	0	106	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.38	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:		****								****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	26	1115	140	0	616	358	507	32	594	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	1115	140	0	616	358	507	32	594	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	26	1115	140	0	616	358	507	32	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1115	140	0	616	358	507	32	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	26	1115	140	0	616	358	507	32	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2843	357	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.39	0.39	0.00	0.19	0.22	0.18	0.01	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.662
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	572	121	66	536	0	0	0	0	486	0	409
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	572	121	66	536	0	0	0	0	486	0	409
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	572	121	66	536	0	0	0	0	486	0	409
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	572	121	66	536	0	0	0	0	486	0	409
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	572	121	66	536	0	0	0	0	486	0	409
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.65	0.35	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2641	559	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.04	0.17	0.00	0.00	0.00	0.00	0.30	0.00	0.26
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	115	422	139	165	475	280	32	305	77	157	423	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	422	139	165	475	280	32	305	77	157	423	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	115	422	139	165	475	280	32	305	77	157	423	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	422	139	165	475	280	32	305	77	157	423	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	422	139	165	475	280	32	305	77	157	423	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	1.26	0.74	1.00	1.60	0.40	1.00	1.30	0.70
Final Sat.:	1600	2407	793	1600	2013	1187	1600	2555	645	1600	2073	1127
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.10	0.24	0.24	0.02	0.12	0.12	0.10	0.20	0.20
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	130	475	118	63	462	96	69	420	141	186	539	121
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	475	118	63	462	96	69	420	141	186	539	121
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	475	118	63	462	96	69	420	141	186	539	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	475	118	63	462	96	69	420	141	186	539	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	475	118	63	462	96	69	420	141	186	539	121
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	1.50	0.50	1.00	1.63	0.37
Final Sat.:	1600	3200	1600	1600	2649	551	1600	2396	804	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.07	0.04	0.17	0.17	0.04	0.18	0.18	0.12	0.21	0.21
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	153	575	90	49	404	121	153	574	145	61	584	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	575	90	49	404	121	153	574	145	61	584	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	575	90	49	404	121	153	574	145	61	584	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	575	90	49	404	121	153	574	145	61	584	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	575	90	49	404	121	153	574	145	61	584	77
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23
Final Sat.:	1600	2767	433	1600	3200	1600	1600	3200	1600	1600	2827	373
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.21	0.03	0.13	0.08	0.10	0.18	0.09	0.04	0.21	0.21
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.390
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	164	929	0	0	600	241
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	164	929	0	0	600	241
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	164	929	0	0	600	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	164	929	0	0	600	241
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	164	929	0	0	600	241
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.00	0.00	0.19	0.15
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	283	0	747	0	772	0	0	625	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	283	0	747	0	772	0	0	625	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	283	0	747	0	772	0	0	625	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	283	0	747	0	772	0	0	625	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	283	0	747	0	772	0	0	625	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.47	0.00	0.24	0.00	0.00	0.13	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	132	537	23	196	744	680	223	220	132	23	301	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	537	23	196	744	680	223	220	132	23	301	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	537	23	196	744	680	223	220	132	23	301	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	537	23	196	744	680	223	220	132	23	301	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	537	23	196	744	680	223	220	132	23	301	118
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.25	0.75	1.00	1.44	0.56
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2000	1200	1600	2299	901
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.01	0.07	0.23	0.43	0.08	0.11	0.11	0.01	0.13	0.13
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	59	131	158	51	64	14	37	296	81	422	744	356
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	131	158	51	64	14	37	296	81	422	744	356
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	131	158	51	64	14	37	296	81	422	744	356
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	131	158	51	64	14	37	296	81	422	744	356
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	59	131	158	51	64	14	37	296	81	422	744	356
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.64	0.36	1.00	1.57	0.43	1.00	1.35	0.65
Final Sat.:	1600	1600	1600	1600	2626	574	1600	2512	688	1600	2164	1036
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.10	0.03	0.02	0.02	0.02	0.12	0.12	0.26	0.34	0.34
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	60.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.106

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	375	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	375	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	94	24	195	82
Total Analysis Volume [veh/h]	80	111	375	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	457	502	455	485	554	556
Degree of Utilization, x	0.18	0.22	0.82	0.20	1.11	1.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.88	0.73	18.09	14.29
95th-Percentile Queue Length [ft]	15.71	20.98	197.01	18.23	452.33	357.34
Approach Delay [s/veh]	12.05		32.86		80.12	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	60.20					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.758
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	195	647	381	51	350	352	57	384	78	173	899	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	647	381	51	350	352	57	384	78	173	899	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	647	381	51	350	352	57	384	78	173	899	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	647	381	51	350	352	57	384	78	173	899	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	647	381	51	350	352	57	384	78	173	899	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.66	0.34	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2660	540	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.24	0.03	0.11	0.22	0.04	0.14	0.14	0.11	0.28	0.06
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	692	605	0	0	415	194	612	0	225	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	692	605	0	0	415	194	612	0	225	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	692	605	0	0	415	194	612	0	225	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	692	605	0	0	415	194	612	0	225	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	692	605	0	0	415	194	612	0	225	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.46	0.00	0.54	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2340	0	860	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.19	0.00	0.00	0.13	0.12	0.26	0.00	0.26	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.558
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	281	0	269	284	331	0	0	500	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	281	0	269	284	331	0	0	500	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	281	0	269	284	331	0	0	500	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	281	0	269	284	331	0	0	500	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	281	0	269	284	331	0	0	500	89
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2716	484
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.17	0.10	0.10	0.00	0.00	0.18	0.18
Crit Moves:				****			****				****	

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	19.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	272	746	735	5	0	186
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	272	746	735	5	0	186
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	68	187	184	1	0	47
Total Analysis Volume [veh/h]	272	746	735	5	0	186
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.71	0.83	0.45	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.42	11.85	7.87	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.57	2.07	0.87	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	39.13	51.85	21.83	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.88		7.81		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	10.24					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.401
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0 1	0 1	1	0 1	0 0
Volume Module:												
Base Vol:	183	0	29	0	0	0	0	191	260	38	254	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	0	29	0	0	0	0	191	260	38	254	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	0	29	0	0	0	0	191	260	38	254	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	0	29	0	0	0	0	191	260	38	254	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	0	29	0	0	0	0	191	260	38	254	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.12	0.16	0.02	0.16	0.00
Crit Moves:	****								****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 2	1 0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	90	1437	0	0	958	51	31	0	57	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1437	0	0	958	51	31	0	57	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1437	0	0	958	51	31	0	57	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1437	0	0	958	51	31	0	57	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	1437	0	0	958	51	31	0	57	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4557	243	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.00	0.00	0.21	0.21	0.02	0.00	0.04	0.00	0.00	0.00
Crit Moves:		****		****					****			

Future with Project Conditions
(City of Carson) 2020
Afternoon Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.889
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 1	1	0 1!	0 0
Volume Module:												
Base Vol:	2	543	320	489	693	0	0	0	3	182	0	341
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	543	320	489	693	0	0	0	3	182	0	341
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	543	320	489	693	0	0	0	3	182	0	341
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	543	320	489	693	0	0	0	3	182	0	341
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	543	320	489	693	0	0	0	3	182	0	341
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.25	0.74	1.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	7	2009	1184	1600	3200	0	0	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.31	0.22	0.00	0.00	0.00	0.00	0.11	0.00	0.21
Crit Moves:		****		****			****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.742
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	21	742	0	0	1361	93	0	0	0	102	122	279
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	742	0	0	1361	93	0	0	0	102	122	279
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	742	0	0	1361	93	0	0	0	102	122	279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	742	0	0	1361	93	0	0	0	102	122	279
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	21	742	0	0	1361	93	0	0	0	102	122	279
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.87	0.13	0.00	0.00	0.00	0.41	0.59	1.00
Final Sat.:	1600	3200	0	0	2995	205	0	0	0	649	951	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.06	0.13	0.17
Crit Moves:	****				****							****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.767
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1 0	2 0	0	1 0	0 1	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	706	150	318	1145	0	62	279	42	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	706	150	318	1145	0	62	279	42	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	706	150	318	1145	0	62	279	42	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	706	150	318	1145	0	62	279	42	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	706	150	318	1145	0	62	279	42	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.65	0.35	1.00	2.00	0.00	1.00	0.87	0.13	0.00	0.00	0.00
Final Sat.:	0	2639	561	1600	3200	0	1600	1391	209	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.36	0.00	0.04	0.20	0.20	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Main St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.024
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	35	496	417	154	875	188	232	1418	103	361	1010	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	496	417	154	875	188	232	1418	103	361	1010	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	496	417	154	875	188	232	1418	103	361	1010	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	496	417	154	875	188	232	1418	103	361	1010	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	496	417	154	875	188	232	1418	103	361	1010	117
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.09	0.91	1.00	1.65	0.35	1.00	2.80	0.20	1.00	2.69	0.31
Final Sat.:	1600	1738	1462	1600	2634	566	1600	4475	325	1600	4302	498
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.29	0.10	0.33	0.33	0.15	0.32	0.32	0.23	0.23	0.23
Crit Moves:		****		****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Main St & Torrance Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1	1 0	1 0	2 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	191	481	11	38	893	367	442	58	488	6	17	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	481	11	38	893	367	442	58	488	6	17	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	481	11	38	893	367	442	58	488	6	17	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	481	11	38	893	367	442	58	488	6	17	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	481	11	38	893	367	442	58	488	6	17	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.96	0.04	1.00	2.00	1.00	0.88	0.12	1.00	0.12	0.34	0.54
Final Sat.:	2880	3128	72	1600	3200	1600	1414	186	1600	192	544	864
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.02	0.28	0.23	0.31	0.31	0.31	0.03	0.03	0.03
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	1272	245	165	1175	0	0	0	0	425	0	453
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1272	245	165	1175	0	0	0	0	425	0	453
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1272	245	165	1175	0	0	0	0	425	0	453
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1272	245	165	1175	0	0	0	0	425	0	453
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1272	245	165	1175	0	0	0	0	425	0	453
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.45	0.01	1.54
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	2323	0	2477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.15	0.06	0.24	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 Avalon Blvd & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.917
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	1 1	1	1 0	1 1	1
Volume Module:												
Base Vol:	245	1012	211	264	1072	266	290	805	592	151	21	191
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	245	1012	211	264	1072	266	290	805	592	151	21	191
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	245	1012	211	264	1072	266	290	805	592	151	21	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1012	211	264	1072	266	290	805	592	151	21	191
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1012	211	264	1072	266	290	805	592	151	21	191
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.40	0.60	1.00	1.73	1.27	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3846	954	1600	2766	2034	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.15	0.21	0.13	0.17	0.28	0.28	0.18	0.29	0.29	0.09	0.01	0.06
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Avalon Blvd & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	157	1005	257	431	1209	86	115	668	159	220	719	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	157	1005	257	431	1209	86	115	668	159	220	719	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	157	1005	257	431	1209	86	115	668	159	220	719	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1005	257	431	1209	86	115	668	159	220	719	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	157	1005	257	431	1209	86	115	668	159	220	719	357
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	4481	319	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.21	0.16	0.15	0.27	0.27	0.07	0.21	0.10	0.14	0.22	0.22
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Avalon Blvd & 184th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.528
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	0 0	1! 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	34	1295	39	56	1506	33	74	0	30	51	0	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	1295	39	56	1506	33	74	0	30	51	0	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1295	39	56	1506	33	74	0	30	51	0	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1295	39	56	1506	33	74	0	30	51	0	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1295	39	56	1506	33	74	0	30	51	0	48
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	0.71	0.00	0.29	1.55	0.00	1.45
Final Sat.:	1600	4800	1600	1600	4697	103	1138	0	462	2473	0	2327
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.02	0.04	0.32	0.32	0.06	0.00	0.07	0.02	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #10 Avalon Blvd & University Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1175	356	355	1310	0	0	0	0	501	0	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1175	356	355	1310	0	0	0	0	501	0	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1175	356	355	1310	0	0	0	0	501	0	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1175	356	355	1310	0	0	0	0	501	0	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1175	356	355	1310	0	0	0	0	501	0	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.12	0.27	0.00	0.00	0.00	0.00	0.31	0.00	0.15
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	111	1279	0	0	1688	121	237	0	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	1279	0	0	1688	121	237	0	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	1279	0	0	1688	121	237	0	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1279	0	0	1688	121	237	0	200	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	1279	0	0	1688	121	237	0	200	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4479	321	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.27	0.00	0.00	0.38	0.38	0.15	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	38	1334	73	61	1761	64	30	0	18	35	1	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	1334	73	61	1761	64	30	0	18	35	1	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1334	73	61	1761	64	30	0	18	35	1	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	1334	73	61	1761	64	30	0	18	35	1	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	1334	73	61	1761	64	30	0	18	35	1	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	2.89	0.11	1.00	0.00	1.00	1.00	0.03	0.97
Final Sat.:	1600	4551	249	1600	4632	168	1600	0	1600	1600	43	1557
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.29	0.04	0.38	0.38	0.02	0.00	0.01	0.02	0.02	0.02
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	222	1385	195	104	1735	92	64	14	135	85	16	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	1385	195	104	1735	92	64	14	135	85	16	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	1385	195	104	1735	92	64	14	135	85	16	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1385	195	104	1735	92	64	14	135	85	16	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	1385	195	104	1735	92	64	14	135	85	16	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.63	0.37	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	2880	4208	592	1600	4800	1600	1600	1600	1600	1600	332	1268
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.07	0.36	0.06	0.04	0.01	0.08	0.05	0.05	0.05
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.008
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	172	1179	181	333	1131	429	348	1008	245	256	658	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	1179	181	333	1131	429	348	1008	245	256	658	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	1179	181	333	1131	429	348	1008	245	256	658	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1179	181	333	1131	429	348	1008	245	256	658	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	1179	181	333	1131	429	348	1008	245	256	658	193
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.18	0.82	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3480	1320	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.11	0.12	0.33	0.33	0.22	0.32	0.15	0.16	0.21	0.12
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	348	1210	0	0	1529	539	0	0	0	186	2	517
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	1210	0	0	1529	539	0	0	0	186	2	517
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	348	1210	0	0	1529	0	0	0	0	186	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	1210	0	0	1529	0	0	0	0	186	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	348	1210	0	0	1529	0	0	0	0	186	2	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.98	0.02	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3166	34	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.38	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2	0 1	2 0	2	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	53	1172	186	0	1183	537	350	226	457	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	1172	186	0	1183	537	350	226	457	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	53	1172	186	0	1183	537	350	226	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1172	186	0	1183	537	350	226	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	53	1172	186	0	1183	537	350	226	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2762	438	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.42	0.42	0.00	0.37	0.34	0.12	0.07	0.00	0.00	0.00	0.00
Crit Moves:		****		****			****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 1		1 0	1 0 2		0 0	0 0 0		0 0	1 0 0		0 1
Volume Module:												
Base Vol:	1	644	158	109	802	0	0	0	0	259	0	329
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	644	158	109	802	0	0	0	0	259	0	329
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	644	158	109	802	0	0	0	0	259	0	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	644	158	109	802	0	0	0	0	259	0	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	644	158	109	802	0	0	0	0	259	0	329
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2570	630	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.07	0.25	0.00	0.00	0.00	0.00	0.16	0.00	0.21
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	110	500	154	225	684	172	59	654	151	177	249	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	500	154	225	684	172	59	654	151	177	249	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	500	154	225	684	172	59	654	151	177	249	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	500	154	225	684	172	59	654	151	177	249	238
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	500	154	225	684	172	59	654	151	177	249	238
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	1.60	0.40	1.00	1.62	0.38	1.00	1.02	0.98
Final Sat.:	1600	2446	754	1600	2557	643	1600	2600	600	1600	1636	1564
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.14	0.27	0.27	0.04	0.25	0.25	0.11	0.15	0.15
Crit Moves:	****					****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #19 Main St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	125	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	191	453	163	165	734	87	82	1014	216	128	644	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	191	453	163	165	734	87	82	1014	216	128	644	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	191	453	163	165	734	87	82	1014	216	128	644	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	191	453	163	165	734	87	82	1014	216	128	644	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	191	453	163	165	734	87	82	1014	216	128	644	137
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.79	0.21	1.00	1.65	0.35	1.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	2861	339	1600	2638	562	1600	2639	561
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.10	0.10	0.26	0.26	0.05	0.38	0.38	0.08	0.24	0.24
Crit Moves:	****				****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #20 Figueroa St & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2 0	1	1 0	2 0	1	1 0	1	1 0
Volume Module:												
Base Vol:	106	505	145	75	722	108	115	1026	221	68	841	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	505	145	75	722	108	115	1026	221	68	841	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	505	145	75	722	108	115	1026	221	68	841	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	505	145	75	722	108	115	1026	221	68	841	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	505	145	75	722	108	115	1026	221	68	841	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1600	2486	714	1600	3200	1600	1600	3200	1600	1600	2897	303
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.05	0.23	0.07	0.07	0.32	0.14	0.04	0.29	0.29
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.529
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	459	1373	0	0	762	337
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	459	1373	0	0	762	337
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	459	1373	0	0	762	337
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	459	1373	0	0	762	337
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	459	1373	0	0	762	337
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.43	0.00	0.00	0.24	0.21
Crit Moves:								****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.845
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	79	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	397	0	471	0	1443	0	0	756	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	397	0	471	0	1443	0	0	756	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	397	0	471	0	1443	0	0	756	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	397	0	471	0	1443	0	0	756	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	397	0	471	0	1443	0	0	756	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.25	0.00	0.29	0.00	0.45	0.00	0.00	0.16	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #23 Central Ave & Victoria St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.764
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	2 0	2 0	1	2 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	153	538	35	176	662	339	509	720	217	18	377	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	538	35	176	662	339	509	720	217	18	377	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	538	35	176	662	339	509	720	217	18	377	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	538	35	176	662	339	509	720	217	18	377	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	538	35	176	662	339	509	720	217	18	377	213
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.54	0.46	1.00	1.28	0.72
Final Sat.:	1600	3200	1600	2880	3200	1600	2880	2459	741	1600	2045	1155
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.02	0.06	0.21	0.21	0.18	0.29	0.29	0.01	0.18	0.18
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #24 Hamilton Ave & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.956
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	139	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	24	34	283	295	318	63	13	647	199	369	506	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	34	283	295	318	63	13	647	199	369	506	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	34	283	295	318	63	13	647	199	369	506	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	34	283	295	318	63	13	647	199	369	506	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	34	283	295	318	63	13	647	199	369	506	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.53	0.47	1.00	1.68	0.32
Final Sat.:	1600	1600	1600	1600	2671	529	1600	2447	753	1600	2681	519
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.18	0.18	0.12	0.12	0.01	0.26	0.26	0.23	0.19	0.19
Crit Moves:			****	****				****		****		

Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	136.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.629

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	739	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	739	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	185	43	84	65
Total Analysis Volume [veh/h]	62	539	739	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	739	484	439	503
Degree of Utilization, x	0.13	1.03	1.63	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	42.23	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1055.76	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		256.78		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	136.79					
Intersection LOS	F					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #26 Figueroa St & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.061
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	64	411	413	187	700	208	69	1041	133	350	698	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	411	413	187	700	208	69	1041	133	350	698	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	411	413	187	700	208	69	1041	133	350	698	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	411	413	187	700	208	69	1041	133	350	698	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	411	413	187	700	208	69	1041	133	350	698	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	3200	1600	1600	2837	363	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.26	0.12	0.22	0.13	0.04	0.37	0.37	0.22	0.22	0.06
Crit Moves:			****	****				****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #27 Figueroa St & I-110 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.745
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	2 0	1	1 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	508	424	0	0	897	303	464	0	139	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	424	0	0	897	303	464	0	139	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	508	424	0	0	897	303	464	0	139	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	508	424	0	0	897	303	464	0	139	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	508	424	0	0	897	303	464	0	139	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.00	1.00	1.54	0.00	0.46	0.00	0.00	0.00
Final Sat.:	2880	3200	0	0	3200	1600	2462	0	738	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.13	0.00	0.00	0.28	0.19	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	430	0	366	231	823	0	0	356	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	430	0	366	231	823	0	0	356	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	430	0	366	231	823	0	0	356	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	430	0	366	231	823	0	0	356	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	430	0	366	231	823	0	0	356	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2719	481
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.23	0.08	0.26	0.00	0.00	0.13	0.13
Crit Moves:				****				****		****		

Intersection Level Of Service Report
Intersection 29: Main Street & Broadway

Control Type:	Two-way stop	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.631

Intersection Setup

Name	Main Street		Main Street		Broadway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Main Street		Main Street		Broadway	
Base Volume Input [veh/h]	217	787	804	18	0	495
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	217	787	804	18	0	495
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	197	201	5	0	124
Total Analysis Volume [veh/h]	217	787	804	18	0	495
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.63	0.88	0.50	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	20.23	12.13	7.95	0.00	0.00	0.00
Movement LOS	C	B	A	A		A
95th-Percentile Queue Length [veh]	1.32	2.27	0.98	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	33.11	56.69	24.53	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.88		7.77		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	8.76					
Intersection LOS	C					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #30 New Intersection & MLK Jr Street

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	0 1	0	0	0 0	0	0 1	0 1	1 0	1 0	0
Volume Module:												
Base Vol:	352	0	55	0	0	0	0	432	350	53	180	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	352	0	55	0	0	0	0	432	350	53	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	352	0	55	0	0	0	0	432	350	53	180	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	352	0	55	0	0	0	0	432	350	53	180	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	352	0	55	0	0	0	0	432	350	53	180	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	1600	1600	1600	1600	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.03	0.00	0.00	0.00	0.00	0.27	0.22	0.03	0.11	0.00
Crit Moves:	****							****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #31 Avalon Blvd & New Driveway

Cycle (sec):	100	Critical Vol./Cap.(X):	0.636
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	0	0	0 2	1 0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	161	1365	0	0	1761	83	84	0	163	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1365	0	0	1761	83	84	0	163	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1365	0	0	1761	83	84	0	163	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1365	0	0	1761	83	84	0	163	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1365	0	0	1761	83	84	0	163	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	2.86	0.14	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3200	4800	0	0	4584	216	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.00	0.00	0.38	0.38	0.05	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			

Future with Project Conditions
(City of Carson) 2020
Saturday Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Main St & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1	1 0	1 0	2	0 0	0 0	1!	0 0	1 0	1!	0 0
Volume Module:												
Base Vol:	0	303	240	449	314	0	0	0	0	198	0	435
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	303	240	449	314	0	0	0	0	198	0	435
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	303	240	449	314	0	0	0	0	198	0	435
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	303	240	449	314	0	0	0	0	198	0	435
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	303	240	449	314	0	0	0	0	198	0	435
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.12	0.88	1.00	2.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	0	1786	1414	1600	3200	0	0	1600	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.28	0.10	0.00	0.00	0.00	0.00	0.12	0.00	0.27
Crit Moves:		****		****								****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Main St & 1-405 NB off

Cycle (sec):	100	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	0 0	0	0 1	0 1	0
Volume Module:												
Base Vol:	14	435	0	0	611	26	0	0	0	259	93	179
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	435	0	0	611	26	0	0	0	259	93	179
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	435	0	0	611	26	0	0	0	259	93	179
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	435	0	0	611	26	0	0	0	259	93	179
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	435	0	0	611	26	0	0	0	259	93	179
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.92	0.08	0.00	0.00	0.00	0.98	0.35	0.67
Final Sat.:	1600	3200	0	0	3069	131	0	0	0	1561	560	1079
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.16	0.17	0.17
Crit Moves:	****				****						****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Main St & I-405 SB On-Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	0.477
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1 1	0	1	0 2	0 0	1	0 0	1 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	438	248	167	702	0	19	78	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	438	248	167	702	0	19	78	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	438	248	167	702	0	19	78	15	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	438	248	167	702	0	19	78	15	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	438	248	167	702	0	19	78	15	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.28	0.72	1.00	2.00	0.00	1.00	0.84	0.16	0.00	0.00	0.00
Final Sat.:	0	2043	1157	1600	3200	0	1600	1342	258	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.10	0.22	0.00	0.01	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****		****				****				

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Avalon Blvd & Artesia Blvd/SR 90

Cycle (sec):	100	Critical Vol./Cap.(X):	0.480
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	1	2 0	3 0	0	0 0	0 0	0 0	1 0	1! 0	1
Volume Module:												
Base Vol:	0	888	309	114	883	0	0	0	0	471	0	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	888	309	114	883	0	0	0	0	471	0	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	888	309	114	883	0	0	0	0	471	0	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	888	309	114	883	0	0	0	0	471	0	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	888	309	114	883	0	0	0	0	471	0	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4800	1600	2880	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.04	0.18	0.00	0.00	0.00	0.00	0.15	0.00	0.14
Crit Moves:			****	****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 Avalon Blvd & MLK Jr St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.496
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	0	0 0	2	1 0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	74	1383	0	0	1340	53	95	0	75	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	1383	0	0	1340	53	95	0	75	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	1383	0	0	1340	53	95	0	75	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1383	0	0	1340	53	95	0	75	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1383	0	0	1340	53	95	0	75	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.89	0.11	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	4800	0	0	4617	183	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.00	0.00	0.29	0.29	0.06	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****		****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Avalon Blvd & Elsmere Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.590
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	162	1302	53	49	1261	108	83	0	124	41	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	1302	53	49	1261	108	83	0	124	41	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	1302	53	49	1261	108	83	0	124	41	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1302	53	49	1261	108	83	0	124	41	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	1302	53	49	1261	108	83	0	124	41	0	26
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	2.76	0.24	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1600	4612	188	1600	4421	379	1600	0	1600	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.28	0.28	0.03	0.29	0.29	0.05	0.00	0.08	0.03	0.00	0.02
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Avalon Blvd & Turmont St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	3 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	201	1507	150	39	1447	73	64	19	134	122	18	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	201	1507	150	39	1447	73	64	19	134	122	18	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1507	150	39	1447	73	64	19	134	122	18	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1507	150	39	1447	73	64	19	134	122	18	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1507	150	39	1447	73	64	19	134	122	18	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.73	0.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.28	0.72
Final Sat.:	2880	4365	435	1600	4800	1600	1600	1600	1600	1600	450	1150
Capacity Analysis Module:												
Vol/Sat:	0.07	0.35	0.35	0.02	0.30	0.05	0.04	0.01	0.08	0.08	0.04	0.04
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Avalon Blvd & Del Amo Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.047
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	2 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	329	1117	162	307	1011	428	474	502	270	241	464	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	329	1117	162	307	1011	428	474	502	270	241	464	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	329	1117	162	307	1011	428	474	502	270	241	464	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	1117	162	307	1011	428	474	502	270	241	464	195
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	329	1117	162	307	1011	428	474	502	270	241	464	195
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	2880	3372	1428	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.21	0.23	0.10	0.11	0.30	0.30	0.30	0.16	0.17	0.15	0.15	0.12
Crit Moves:	****				****		****				****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Avalon Blvd & I-405 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Ignore			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 1	0 0	1
Volume Module:												
Base Vol:	529	1561	0	0	1479	714	0	0	0	427	0	648
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	529	1561	0	0	1479	714	0	0	0	427	0	648
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	529	1561	0	0	1479	0	0	0	0	427	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	529	1561	0	0	1479	0	0	0	0	427	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	529	1561	0	0	1479	0	0	0	0	427	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	2880	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.18	0.49	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Crit Moves:	****				****					****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #16 Avalon Blvd & I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	1.117
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	0 0	2 0	1	2 0	2 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	278	1196	178	0	1040	841	915	273	683	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	1196	178	0	1040	841	915	273	683	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	278	1196	178	0	1040	841	915	273	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	1196	178	0	1040	841	915	273	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	278	1196	178	0	1040	841	915	273	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	2785	415	0	3200	1600	2880	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.43	0.43	0.00	0.33	0.53	0.32	0.09	0.00	0.00	0.00	0.00
Crit Moves:	****					****	****					

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #17 Main St & SR 91 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.359
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	326	162	35	351	0	0	0	0	135	0	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	326	162	35	351	0	0	0	0	135	0	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	326	162	35	351	0	0	0	0	135	0	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	326	162	35	351	0	0	0	0	135	0	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	326	162	35	351	0	0	0	0	135	0	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1600	2138	1062	1600	3200	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.02	0.11	0.00	0.00	0.00	0.00	0.08	0.00	0.07
Crit Moves:		****		****						****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #18 Main St & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	366	131	163	401	74	36	315	50	130	185	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	366	131	163	401	74	36	315	50	130	185	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	366	131	163	401	74	36	315	50	130	185	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	366	131	163	401	74	36	315	50	130	185	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	366	131	163	401	74	36	315	50	130	185	152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.47	0.53	1.00	1.69	0.31	1.00	1.73	0.27	1.00	1.10	0.90
Final Sat.:	1600	2357	843	1600	2701	499	1600	2762	438	1600	1757	1443
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.16	0.10	0.15	0.15	0.02	0.11	0.11	0.08	0.11	0.11
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #21 I-110 NB On-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.419
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0	0	0	0	2	0	1	1	0	1	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	384	877	0	4	545	318
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	384	877	0	4	545	318
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	384	877	0	4	545	318
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	384	877	0	4	545	318
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	384	877	0	4	545	318
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	1600	0	0	0	0	3200	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.27	0.00	0.00	0.17	0.20
Crit Moves:							****					****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #22 I-110 SB Off-Ramp & 190th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.649
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	0 0	2 0	0	0 0	3 0	0
Volume Module:												
Base Vol:	0	0	0	356	0	364	0	1028	0	0	585	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	356	0	364	0	1028	0	0	585	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	356	0	364	0	1028	0	0	585	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	356	0	364	0	1028	0	0	585	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	356	0	364	0	1028	0	0	585	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.23	0.00	0.32	0.00	0.00	0.12	0.00
Crit Moves:						****		****		****		

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #28 SR 91 EB Ramps & Albertoni St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.446
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Street Name:	SR 91 EB Ramps						Albertoni St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	1 0	0 0	1	2 0	2 0	0	0 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	209	0	195	295	275	0	0	294	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	209	0	195	295	275	0	0	294	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	209	0	195	295	275	0	0	294	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	209	0	195	295	275	0	0	294	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	209	0	195	295	275	0	0	294	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.62	0.38
Final Sat.:	0	0	0	1600	0	1600	2880	3200	0	0	2599	601
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.12	0.10	0.09	0.00	0.00	0.11	0.11
Crit Moves:				****			****				****	

Appendix E

City of Carson Traffic Analysis

Appendix E
City of Carson Traffic Analysis

Although Los Angeles County Department of Public Works (LACDPW) is the lead agency for the Project, a number of the intersections in the Study Area are within the jurisdiction of the City of Carson (City). The analysis presented in the Traffic Study is based on the LACDPW methodologies and guidelines for traffic impact studies. The analysis in this Appendix, presented for informational purposes, is based on the methodology employed by the City.

TRAFFIC ANALYSIS METHODOLOGY

Study Scope and Analysis Conditions

The same study area of 29 existing and two future intersections was analyzed. The base data utilized, including the existing intersection configurations and traffic volumes, are shared with the LACDPW analysis and provided in Traffic Study Appendices B and C. The weekday analysis is based on the full study area, while the Saturday analysis is a focused study of 17 intersections that were selected based on proximity and access to the Project site.

The primary difference between the City and LACDPW analysis methodologies is in the application of background traffic growth and the resulting intersection level of service (LOS) analysis. Specifically, the City allows an increase in background traffic volumes due to an annual ambient growth rate and the traffic anticipated from identified cumulative projects. Therefore, the City methodology also examines the effects of the Project based on Future without and Future with Project Conditions. As a result, the following scenarios were analyzed under the City methodology:

- Existing Conditions (Year 2018) – The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions; the Existing Conditions represent conditions as of the issuance of the Project's Initial Study.

- Existing with Project Conditions (Year 2018) – This analysis condition projects the potential intersection operating conditions that could be expected if the Project were built under existing conditions. This analysis evaluates the potential Project-related traffic impacts as compared to existing conditions.

- Future Conditions (Year 2020) – This analysis projects the potential intersection operating conditions that could be expected with the addition of ambient growth and traffic from cumulative background projects to the Existing Conditions. This analysis represents the potential future baseline conditions prior to development of the Project; effectively, the effects of cumulative background development.

- Future with Project Conditions (Year 2020) – This analysis projects the potential intersection operating conditions that could be expected with the addition of Project traffic to the Future Conditions. This analysis identifies the potential incremental impacts of the Project within the study area.

Intersection Analysis Methodology

Per City guidelines, Intersection Capacity Utilization (ICU) methodology from *Highway Capacity Manual, Special Report 209* (Transportation Research Board, 2000) was utilized to obtain the volume-to-capacity (V/C) ratio for signalized intersections. As in the Traffic Study, unsignalized intersections were analyzed using the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodology with a signal warrant analysis and delay analysis using. Traffix software was used to calculate the V/C ratio for signalized intersections and Vistro software was used to analyze the HCM delay for unsignalized intersections. LOS worksheets for each scenario are provided in the Attachment.

Impact Criteria and Significance Thresholds

The significance of the potential impacts of Project generated traffic at the signalized study intersections was determined using criteria identified by the City, which indicate that a project is considered to have a significant traffic impact on a signalized intersection if the increase in the V/C ratio attributable to the project exceeds the specified threshold based on the final intersection LOS:

Intersection Conditions with Project Traffic		Significant Impact Threshold for Project-related Increase in V/C Ratio
LOS	V/C	
E, F	> 0.900	Equal to or greater than 0.02

Source: City of Carson.

The relative impact of the Project-added traffic volumes was evaluated based on analysis of existing and future operating conditions at the study intersections, with and without the Project. Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS D after the addition of project traffic. If the intersection, however, is operating at LOS F after the addition of project traffic and the incremental change in the V/C ratio is 0.020 or greater, the project would be considered to have a significant impact. LOS D is the minimum acceptable operation of an intersection.

Although the City does not identify a significance threshold for unsignalized intersections, the Traffic Study conservatively assumed that meeting a signal warrant constitutes a significant impact.

PROJECT TRIP GENERATION ESTIMATE AND ASSIGNMENT

Both the development and assignment of the Project trip generation estimates through the 31 analyzed intersections are detailed in Chapter 3 of the Traffic Study. As summarized, the Project is estimated to generate 3,814 net new weekday trips, including 190 net new morning peak hour trips and 437 net new afternoon peak hour trips. On Saturday, a total of 6,601 net new daily trips are anticipated, including 794 net new mid-day peak hour trips.

TRAFFIC VOLUME DEVELOPMENT

Existing Traffic Volumes

The existing traffic volumes described in Chapter 2 of the Traffic Study were used as the basis for the development of the future conditions traffic volumes.

Ambient Traffic Growth

Existing traffic is expected to increase as a result of regional growth and development outside the Study Area. In order to main consistency with recently completed traffic studies within the Study Area, such as *The District at South Bay Transportation Impact Analysis* (Fehr & Peers, September 2017), an ambient growth rate of 0.5% per year was applied to reflect areawide growth. Based on the existing year of 2018 and projected build-out year of 2020, the total adjustment applied over the two-year period was 1.0%.

Cumulative Projects

The development and assignment of cumulative project trip generation estimates through the analyzed intersections are detailed in Chapter 5 of the Traffic Study. A total of 37,703 daily trips are anticipated, including 1,843 morning peak hour and 3,162 afternoon peak hour trips. On Saturday, approximately 3,818 mid-day peak hour trips are estimated. The geographic assignment of the cumulative projects traffic is based on several factors, including the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system.

The combination of the existing traffic volumes, ambient traffic growth, and traffic from cumulative projects form the Future Conditions without Project traffic volumes. This scenario was used as the condition to evaluate potential impacts from the addition of Project traffic.

INTERSECTION LOS

Existing Conditions (Year 2018)

During the weekday morning and afternoon peak periods, 28 of the 29 existing intersections operate at LOS D or better during both peak periods. The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) operates at LOS E and LOS F during the morning and afternoon peak hour, respectively. The unsignalized intersection of Hamilton Avenue & I-110

Southbound Ramps (Intersection #25) met signal warrants under Existing conditions.

On Saturday, all 15 existing intersections operate at LOS A or B or better during the mid-day peak period.

Existing with Project Conditions (Year 2018)

The addition of Project traffic to the existing conditions results in the analysis of all 31 intersections. During the weekday morning and afternoon peak periods, 27 of the 29 existing intersections operate at LOS D or better during both peak periods. The intersections of Avalon Boulevard & Del Amo Boulevard (Intersection #14) and Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) are projected to operate at LOS E and LOS F during either or both peak hours. The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Existing with Project Conditions.

A total of 17 intersections are analyzed with the addition of Project traffic during the Saturday mid-day peak hour. All 17 are projected to operate at LOS A or B better during the mid-day peak period.

Future Conditions (Year 2020)

During the future conditions weekday morning and afternoon peak periods, 24 of the 29 existing intersections are projected to operate at LOS D or better during both peak periods; on Saturday, 13 of the 15 existing intersections are projected to operate at LOS A or B during the mid-day peak period. The following intersections are projected to operate at LOS E or LOS F during the weekday or Saturday peak hours:

4. Main Street & Del Amo Boulevard (afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon and Saturday mid-day peak hours)
16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour)
24. Hamilton Avenue & Del Amo Boulevard (afternoon peak hour)

25. Hamilton Avenue & I-110 Southbound ramps (morning and afternoon peak hour)
26. Figueroa Street & I-110 Northbound ramps (afternoon peak hour)

The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Future without Project conditions.

Future with Project Conditions (Year 2020)

With the addition of Project traffic, 23 intersections are projected to operate at LOS D or better during both weekday peak periods and 15 intersections are projected to operate at LOS D or better during the Saturday mid-day peak hour. The following intersections are projected to operate at LOS E or LOS F during the weekday or Saturday peak hours:

4. Main Street & Del Amo Boulevard (afternoon peak hour)
7. Avalon Boulevard & Albertoni Street (afternoon peak hour)
14. Avalon Boulevard & Del Amo Boulevard (weekday morning and afternoon and Saturday mid-day peak hours)
16. Avalon Boulevard & I-405 Southbound Ramps (Saturday mid-day peak hour)
18. Main Street & Albertoni Street (afternoon peak hour)
19. Main Street & Victoria Street (afternoon peak hour)
24. Hamilton Avenue & Del Amo Boulevard (afternoon peak hour)
25. Hamilton Avenue & I-110 Southbound ramps (morning and afternoon peak hour)
26. Figueroa Street & I-110 Northbound ramps (afternoon peak hour)

Tables E-1A and E-1B summarize the results of the Existing Conditions for the weekday and Saturday peak hours, respectively. Similarly, Tables E-2A and E-2B summarize the results of the Future Conditions analyses.

The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Future with Project Conditions.

IMPACT ANALYSIS

Existing with Project Conditions

None of the 29 signalized intersections would be considered to be significantly impacted on weekdays and none of the 17 analyzed intersections would be considered to be significantly impacted on Saturdays under City criteria. However, the unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Existing with Project Conditions and would, therefore, be considered significantly impacted based on the criteria in the Traffic Study.

Future with Project Conditions

Under weekday conditions, three of the 29 signalized intersections would be considered to be significantly impacted under City criteria:

7. Avalon Boulevard & Albertoni Street
18. Main Street & Albertoni Street
19. Main Street & Victoria Street

These are the same intersections that would be impacted under the analysis detailed in Chapter 5 of the Traffic Study.

The unsignalized intersection of Hamilton Avenue & I-110 Southbound Ramps (Intersection #25) met signal warrants under Future with Project Conditions and would, therefore, be considered significantly impacted based on the criteria in the Traffic Study.

While there were no significant impacts identified during Saturday mid-day under the County analysis, the City analysis identified significant impacts at two of the 17 analyzed intersections:

14. Avalon Boulevard & Del Amo Boulevard
16. Avalon Boulevard & I-405 Southbound Ramps

Weekday Impacts

The following mitigation measures for the three intersections projected to be impacted by the Project on weekdays are the same as identified when using the County methodology.

7. Avalon Boulevard & Albertoni Street. The intersection mitigation consists of providing an additional northbound left-turn lane for a total of two northbound left-turn lanes on Avalon Boulevard. This measure could be accommodated by restriping the painted gore/median between the existing northbound left-turn and through lanes.

18. Main Street & Albertoni Street. The intersection mitigation consists of providing an eastbound right-turn lane on Albertoni Street, resulting in an eastbound approach providing one left-turn lane, two through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 24 foot wide curb lane into a 12 foot wide through lane and 12 foot wide right-turn lane and restricting on-street parking for an additional 40 feet along the south curb of Albertoni Street west of the intersection (for a total of 100 feet with restricted parking).

19. Main Street & Victoria Street. The intersection mitigation consists of providing an eastbound right-turn lane on Victoria Street, resulting in an eastbound approach providing one left-turn lane, two through lanes, and one right-turn lane. This measure could be accommodated by restriping the existing 44 foot wide eastbound approach to provide a total of four 11 foot wide lanes, comprised of one left-turn lane, two through lanes, and one right-turn lane and restricting on-street parking for an additional 50 feet along the south curb of Albertoni Street west of the intersection (for a total of 100 feet with restricted parking).

Saturday Impacts

The following mitigation measures for the two intersections projected to be impacted by the Project on weekends are the same as identified when using the County methodology..

14. Avalon Boulevard & Del Amo Boulevard. The intersection mitigation consists of providing an additional northbound left-turn lane on Avalon Boulevard, resulting in a northbound approach providing two left-turn lanes, three through lanes, and one right-turn lane. This measure could be

accommodated by reconstructing the northbound left-turn pocket to generally mirror the configuration and dimensions of the existing southbound left-turn pocket. This is the same mitigation identified for the intersection when using the County methodology.

16. Avalon Boulevard & I-405 Southbound Ramps. The intersection mitigation consists of operational modifications that result in the addition of a southbound right-turn overlap signal phase and the associated signal equipment upgrades.

TABLE E-1A
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Impacted with Carson criteria? [a]
1.	Main Street & MLK Jr Street	AM	0.415	A	0.471	A	0.056	NO
		PM	0.524	A	0.617	B	0.093	NO
2.	Main Street & I-405 NB Off-Ramp	AM	0.567	A	0.576	A	0.009	NO
		PM	0.675	B	0.694	B	0.019	NO
3.	Main Street & I-405 SB On-Ramp	AM	0.452	A	0.463	A	0.011	NO
		PM	0.702	C	0.718	C	0.016	NO
4.	Main Street & Del Amo Boulevard	AM	0.665	B	0.679	B	0.014	NO
		PM	0.864	D	0.876	D	0.012	NO
5.	Main Street & Torrance Boulevard	AM	0.622	B	0.626	B	0.004	NO
		PM	0.754	C	0.757	C	0.003	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.546	A	0.547	A	0.001	NO
		PM	0.570	A	0.573	A	0.003	NO
7.	Avalon Boulevard & Albertoni Street	AM	0.647	B	0.649	B	0.002	NO
		PM	0.843	D	0.865	D	0.022	NO
8.	Avalon Boulevard & Victoria Street	AM	0.590	A	0.595	A	0.005	NO
		PM	0.736	C	0.751	C	0.015	NO
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.392	A	0.395	A	0.003	NO
		PM	0.469	A	0.484	A	0.015	NO
10.	Avalon Boulevard & University Drive	AM	0.667	B	0.669	B	0.002	NO
		PM	0.723	C	0.731	C	0.008	NO
11.	Avalon Boulevard & MLK Jr Street	AM	0.418	A	0.434	A	0.016	NO
		PM	0.592	A	0.639	B	0.047	NO
12.	Avalon Boulevard & Elsmere Drive	AM	0.459	A	0.461	A	0.002	NO
		PM	0.435	A	0.500	A	0.065	NO
13.	Avalon Boulevard & Turmont Street	AM	0.520	A	0.522	A	0.002	NO
		PM	0.494	A	0.504	A	0.010	NO
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.797	C	0.798	C	0.001	NO
		PM	0.897	D	0.902	E	0.005	NO
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.470	A	0.470	A	0.000	NO
		PM	0.508	A	0.511	A	0.003	NO
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.602	B	0.603	B	0.001	NO
		PM	0.586	A	0.590	A	0.004	NO
17.	Main Street & SR-91 WB Ramps	AM	0.624	B	0.632	B	0.008	NO
		PM	0.581	A	0.592	A	0.011	NO
18.	Main Street & Albertoni Street	AM	0.688	B	0.698	B	0.010	NO
		PM	0.814	D	0.849	D	0.035	NO
19.	Main Street & Victoria Street	AM	0.525	A	0.547	A	0.022	NO
		PM	0.736	C	0.777	C	0.041	NO
20.	Figueroa Street & Victoria Street	AM	0.605	B	0.609	B	0.004	NO
		PM	0.692	B	0.707	C	0.015	NO
21.	I-110 NB On-Ramp & 190th Street	AM	0.353	A	0.358	A	0.005	NO
		PM	0.471	A	0.483	A	0.012	NO
22.	I-110 SB Off-Ramp & 190th Street	AM	0.769	C	0.772	C	0.003	NO
		PM	0.802	D	0.809	D	0.007	NO
23.	Central Avenue & Victoria Street	AM	0.799	C	0.800	C	0.001	NO
		PM	0.736	C	0.739	C	0.003	NO
24.	Hamilton Avenue & Del Amo Blvd	AM	0.546	A	0.547	A	0.001	NO
		PM	0.768	C	0.778	C	0.010	NO
25.	Hamilton Avenue & I-110 SB Ramps	AM	40.0	E	40.6	E	0.6	[c]
		PM	81.8	F	86.7	F	4.9	[c]
26.	Figueroa Street & Del Amo Boulevard	AM	0.730	C	0.733	C	0.003	NO
		PM	0.822	D	0.834	D	0.012	NO
27.	Figueroa Street & I-110 NB Ramps	AM	0.698	B	0.700	B	0.002	NO
		PM	0.705	C	0.711	C	0.006	NO
28.	SR-91 EB Ramps & Albertoni Street	AM	0.551	A	0.552	A	0.001	NO
		PM	0.621	B	0.621	B	0.000	NO
29.	Main Street & Broadway	AM	17.8	C	18.4	C	0.6	NO
		PM	17.1	C	18.0	C	0.9	NO
30.	New Intersection & MLK Jr Street	AM	New Intersection		0.291	A	0.291	N/A
		PM			0.453	A	0.453	N/A
31.	Avalon Boulevard & New Intersection	AM	New Intersection		0.378	A	0.378	N/A
		PM			0.433	A	0.433	N/A

Notes:

The analysis in this able is for informational purposes only and prepared using the City of Carson's analysis methodology and significant impact criteria.

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour

[a] Column presents, for informational purposes, potential impacts when applying the City of Carson significant impact criteria.

[b] Unsignalized Intersection. The City of Carson does not provide significance thresholds for unsignalized intersections. However, signal warrants were performed for unsignalized intersections in the Traffic Study.

[c] Signal warrants were met under Existing, Existing with Project, and Future with Project Conditions.

TABLE E-1B
EXISTING WITH PROJECT CONDITIONS (YEAR 2018) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Existing Conditions (Year 2018)		Existing with Project Conditions (Year 2018)			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.303	A	0.447	A	0.144	NO
2.	Main Street & I-405 NB Off-Ramp	MD	0.321	A	0.347	A	0.026	NO
3.	Main Street & I-405 SB On-Ramp	MD	0.328	A	0.356	A	0.028	NO
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.424	A	0.448	A	0.024	NO
11.	Avalon Boulevard & MLK Jr Street	MD	0.396	A	0.419	A	0.023	NO
12.	Avalon Boulevard & Elsmere Drive	MD	0.365	A	0.515	A	0.150	NO
13.	Avalon Boulevard & Turmont Street	MD	0.436	A	0.470	A	0.034	NO
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.634	B	0.659	B	0.025	NO
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.528	A	0.543	A	0.015	NO
16.	Avalon Boulevard & I-405 SB Ramps	MD	0.657	B	0.674	B	0.017	NO
17.	Main Street & SR-91 WB Ramps	MD	0.277	A	0.295	A	0.018	NO
18.	Main Street & Albertoni Street	MD	0.424	A	0.464	A	0.040	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.353	A	0.362	A	0.009	NO
22.	I-110 SB Off-Ramp & 190th Street	MD	0.603	B	0.614	B	0.011	NO
28	SR-91 EB Ramps & Albertoni Street	MD	0.433	A	0.437	A	0.004	NO
30.	New driveway & MLK Jr Street	MD	New Intersection		0.299	A	-	N/A
31.	Avalon Boulevard & New driveway	MD	New Intersection		0.341	A	-	N/A

MD - Saturday Midday Peak Hour
[a] Significance based on City of Carson thresholds

TABLE E-2A
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - WEEKDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Future Conditions (Year 2020)		Future with Project Conditions (Year 2020)				Future with Project Conditions (Year 2020) with Mitigation			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Impacted with Carson criteria? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Impacted with Carson criteria? [a]
1.	Main Street & MLK Jr Street	AM	0.581	A	0.641	B	0.060	NO				
		PM	0.791	C	0.889	D	0.098	NO				
2.	Main Street & I-405 NB Off-Ramp	AM	0.590	A	0.600	A	0.010	NO				
		PM	0.723	C	0.742	C	0.019	NO				
3.	Main Street & I-405 SB On-Ramp	AM	0.475	A	0.486	A	0.011	NO				
		PM	0.752	C	0.767	C	0.015	NO				
4.	Main Street & Del Amo Boulevard	AM	0.765	C	0.769	C	0.004	NO				
		PM	1.016	F	1.024	F	0.008	NO				
5.	Main Street & Torrance Boulevard	AM	0.658	B	0.662	B	0.004	NO				
		PM	0.781	C	0.789	C	0.008	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	AM	0.572	A	0.573	A	0.001	NO				
		PM	0.602	B	0.605	B	0.003	NO				
7.	Avalon Boulevard & Albertoni Street	AM	0.664	B	0.666	B	0.002	NO	0.666	B	0.002	NO
		PM	0.895	D	0.917	E	0.022	YES	0.861	D	-0.034	NO
8.	Avalon Boulevard & Victoria Street	AM	0.627	B	0.632	B	0.005	NO				
		PM	0.792	C	0.814	D	0.022	NO				
9.	Avalon Boulevard & 184th Street-StubHub Center Gate	AM	0.416	A	0.420	A	0.004	NO				
		PM	0.512	A	0.528	A	0.016	NO				
10.	Avalon Boulevard & University Drive	AM	0.676	B	0.678	B	0.002	NO				
		PM	0.767	C	0.781	C	0.014	NO				
11.	Avalon Boulevard & MLK Jr Street	AM	0.445	A	0.469	A	0.024	NO				
		PM	0.647	B	0.694	B	0.047	NO				
12.	Avalon Boulevard & Elsmere Drive	AM	0.489	A	0.492	A	0.003	NO				
		PM	0.486	A	0.546	A	0.060	NO				
13.	Avalon Boulevard & Turmont Street	AM	0.634	B	0.636	B	0.002	NO				
		PM	0.670	B	0.676	B	0.006	NO				
14.	Avalon Boulevard & Del Amo Boulevard	AM	0.922	E	0.923	E	0.001	NO				
		PM	1.003	F	1.008	F	0.005	NO				
15.	Avalon Boulevard & I-405 NB Ramps	AM	0.514	A	0.515	A	0.001	NO				
		PM	0.595	A	0.598	A	0.003	NO				
16.	Avalon Boulevard & I-405 SB Ramps	AM	0.668	B	0.668	B	0.000	NO				
		PM	0.642	B	0.646	B	0.004	NO				
17.	Main Street & SR-91 WB Ramps	AM	0.654	B	0.662	B	0.008	NO				
		PM	0.613	B	0.624	B	0.011	NO				
18.	Main Street & Albertoni Street	AM	0.726	C	0.729	C	0.003	NO	0.698	B	-0.028	NO
		PM	0.899	D	0.934	E	0.035	YES	0.803	D	-0.096	NO
19.	Main Street & Victoria Street	AM	0.626	B	0.647	B	0.021	NO	0.532	A	-0.094	NO
		PM	0.899	D	0.940	E	0.041	YES	0.747	C	-0.152	NO
20.	Figueroa Street & Victoria Street	AM	0.637	B	0.641	B	0.004	NO				
		PM	0.745	C	0.754	C	0.009	NO				
21.	I-110 NB On-Ramp & 190th Street	AM	0.385	A	0.390	A	0.005	NO				
		PM	0.518	A	0.529	A	0.011	NO				
22.	I-110 SB Off-Ramp & 190th Street	AM	0.805	D	0.808	D	0.003	NO				
		PM	0.838	D	0.845	D	0.007	NO				
23.	Central Avenue & Victoria Street	AM	0.815	D	0.816	D	0.001	NO				
		PM	0.760	C	0.764	C	0.004	NO				
24.	Hamilton Avenue & Del Amo Blvd	AM	0.608	B	0.612	B	0.004	NO				
		PM	0.945	E	0.956	E	0.011	NO				
25.	Hamilton Avenue & I-110 SB Ramps	AM	59.3	F	60.2	F	0.9	[c]	8.8	A	-50.5	[c]
		PM	131.0	F	136.8	F	5.8	[c]	7.3	A	-123.7	[c]
26.	Figueroa Street & Del Amo Boulevard	AM	0.756	C	0.758	C	0.002	NO				
		PM	1.048	F	1.061	F	0.013	NO				
27.	Figueroa Street & I-110 NB Ramps	AM	0.729	C	0.732	C	0.003	NO				
		PM	0.740	C	0.745	C	0.005	NO				
28.	SR-91 EB Ramps & Albertoni Street	AM	0.558	A	0.558	A	0.000	NO				
		PM	0.626	B	0.626	B	0.000	NO				
29.	Main Street & Broadway	AM	18.8	C	19.4	C	0.6	NO				
		PM	19.1	C	20.2	C	1.1	NO				
30.	New Intersection & MLK Jr Street	AM	New Intersection		0.401	A	0.401	N/A				
		PM			0.623	B	0.623	N/A				
31.	Avalon Boulevard & New Intersection	AM	New Intersection		0.436	A	0.436	N/A				
		PM			0.636	B	0.636	N/A				

Notes:

The analysis in this able is for informational purposes only and prepared using the City of Carson's analysis methodology and significant impact criteria.

AM - Weekday AM Peak Hour, PM - Weekday PM Peak Hour

[a] Column presents, for informational purposes, potential impacts when applying the City of Carson significant impact criteria.

[b] Unsignalized Intersection. The City of Carson does not provide significance thresholds for unsignalized intersections. However, signal warrants were performed for unsignalized intersections in the Traffic Study.

[c] Signal warrants were met under Existing, Existing with Project, and Future with Project Conditions.

TABLE E-2B
FUTURE WITH PROJECT CONDITIONS (YEAR 2020) - SATURDAY
INTERSECTION PEAK HOUR LEVELS OF SERVICE - CITY OF CARSON METHODOLOGY

No.	Signalized Intersection	Peak Hour	Future without Project Conditions (Year 2020)		Future with Project Conditions (Year 2020)				Future with Project Conditions (Year 2020) with Mitigation			
			V/C Ratio / Delay	LOS	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]	V/C Ratio / Delay	LOS	Change in V/C Ratio	Significant Impact? [a]
1.	Main Street & MLK Jr Street	MD	0.680	B	0.822	D	0.142	NO				
2.	Main Street & I-405 NB Off-Ramp	MD	0.453	A	0.474	A	0.021	NO				
3.	Main Street & I-405 SB On-Ramp	MD	0.449	A	0.477	A	0.028	NO				
6.	Avalon Boulevard & SR-91 WB On-Ramp	MD	0.466	A	0.480	A	0.014	NO				
11.	Avalon Boulevard & MLK Jr Street	MD	0.473	A	0.496	A	0.023	NO				
12.	Avalon Boulevard & Elsmere Drive	MD	0.439	A	0.590	A	0.151	NO				
13.	Avalon Boulevard & Turmont Street	MD	0.605	B	0.631	B	0.026	NO				
14.	Avalon Boulevard & Del Amo Boulevard	MD	0.994	E	1.047	F	0.053	YES	0.923	E	-0.071	NO
15.	Avalon Boulevard & I-405 NB Ramps	MD	0.714	C	0.725	C	0.011	NO				
16.	Avalon Boulevard & I-405 SB Ramps	MD	1.076	F	1.117	F	0.041	YES	0.916	E	-0.160	NO
17.	Main Street & SR-91 WB Ramps	MD	0.341	A	0.359	A	0.018	NO				
18.	Main Street & Albertoni Street	MD	0.553	A	0.599	A	0.046	NO	0.583	A	0.030	NO
21.	I-110 NB On-Ramp & 190th Street	MD	0.406	A	0.419	A	0.013	NO				
22.	I-110 SB Off-Ramp & 190th Street	MD	0.637	B	0.649	B	0.012	NO				
28	SR-91 EB Ramps & Albertoni Street	MD	0.442	A	0.446	A	0.004	NO				
30.	New driveway & MLK Jr Street	MD	New Intersection		0.740	C	-	N/A				
31.	Avalon Boulevard & New driveway	MD	New Intersection		0.614	B	-	N/A				

MD - Saturday Midday Peak Hour
[a] Significance based on City of Carson thresholds

Appendix F

Construction Impact Analysis

Appendix F
Construction Traffic

A construction period analysis was performed to identify any temporary traffic impacts associated with the Project's construction activity.

SCHEDULE

This analysis is based on a review of the construction activity schedule provided by the Applicant, which assumes an 11-month duration and is comprised of the following eight phases with tentative active dates:

1. Site Preparation & Demolition (August 2019 through October 2019)
2. Trenching (August 2019 through October 2019)
3. Grading (August 2019 through October 2019)
4. Pile Driving (December 2019 through January 2020)
5. Dynamic Compaction (December 2019 through January 2020)
6. Construction (October 2019 through March 2020)
7. Paving (November 2019 through May 2020)
8. Architectural Coatings (May 2020 through June 2020)

HAUL ROUTES, PARKING, AND STAGING

Haul trucks entering and leaving the project site would primarily use Avalon Boulevard to access I-405 and/or SR 91.

Construction workers would park on-site in designated construction worker parking areas.

Construction equipment, supplies, and materials would be staged on-site.

TRIP GENERATION

The maximum trip activity would occur during the anticipated October 2019 overlap of the Site Preparation & Demolition, Trenching, Grading, and Construction phases.

On a peak day during this period, there would be three main types of construction traffic: haul trips (e.g., soil export and import), vendor trips (e.g., material delivery), and worker trips. There would be a maximum of up to 324 haul trucks, 10 vendor trips and 70 workers to and from the Project site per day.

Truck trips were converted to passenger car equivalent (PCE) trips to account for their greater effect on congestion and travel speeds as compared to passenger cars. Using a PCE factor of 2.0, 324 construction and 10 vendor trucks per day would result in 668 daily PCE trips both to and from the Project site.

While truck trips are typically scheduled outside of the peak hours, this analysis conservatively assumed that haul truck trips and delivery truck trips would occur evenly throughout the day, including during the peak hours. Therefore, the morning and afternoon peak hours each would be affected by an equal number of PCE trips, equal to one tenth the maximum number of trips over a 10-hour workday.

As detailed in Table F-1, the Project is anticipated to generate a maximum of 808 daily PCE trips during the periods of highest construction activity. A total of 137 PCE trips are estimated during both the morning (105 inbound and 32 outbound) and afternoon (32 inbound and 105 outbound) peak hours.

CONSTRUCTION TRAFFIC IMPACTS

The following intersections were analyzed based on the haul routes described above:

6. Avalon Boulevard & SR-91 Westbound On-ramp
7. Avalon Boulevard & Albertoni Street
8. Avalon Boulevard & Victoria Street

9. Avalon Boulevard & 184th Street/StubHub Center Gate
10. Avalon Boulevard & University Drive
11. Avalon Boulevard & Martin Luther King, Jr. Street
12. Avalon Boulevard & Elsmere Drive
13. Avalon Boulevard & Turmont Street
14. Avalon Boulevard & Del Amo Boulevard
15. Avalon Boulevard & I-405 Northbound ramps
16. Avalon Boulevard & I-405 Southbound ramps
31. Avalon Boulevard & New driveway

The following intersections are anticipated to be temporarily impacted by construction traffic activity based peak hour trip generation estimates described above:

14. Avalon Boulevard & Del Amo Boulevard (afternoon peak hour)

In addition to these potential intersection impacts, the Project would require the construction of access driveways, modification of left-turn lanes, and installation of a traffic signals, which may result in temporary lane closures on the street network.

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

To minimize the effects of these temporary traffic impacts during Project construction, the Applicant would implement a Construction Traffic Management Plan. It would be developed prior to the issuance of a Project site grading permit and is anticipated to include the following elements as appropriate:

- Advance notification of upcoming construction activities, including durations and daily hours of construction, to adjacent property owners and occupants as well as nearby schools
- Prohibition of construction worker parking on adjacent residential streets and identification of construction employee parking locations and protocols
- Temporary traffic control during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways (e.g., flag men)

- Prohibition of construction-related vehicle parking on surrounding public streets
- Safety precautions for pedestrian and bicyclists through such measures as alternate routing and protection barriers as appropriate, including along all identified Los Angeles Unified School District (LAUSD) and Compton Unified School District (CUSD) pedestrian routes to nearby schools
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible, and so as to not impede school drop-off and pick-up activities and students using LAUSD/CUSD's identified pedestrian routes to nearby schools
- Coordination with public transit agencies to provide advanced notifications of any anticipated stop relocations and durations
- Provision of advanced notification of any temporary on-street parking removals and duration of removals
- Establishment of construction hours in compliance with Carson Municipal Code
- Establishment of a construction phone number that shall be posted on the Project site and appointment of a construction liaison officer to respond to concerns or inquiries regarding project construction
- Maintenance of unimpeded emergency access to the Project site and nearby properties
- Establishment of truck access and staging areas relative to the haul route approved with the project
- Provision of construction site security

With implementation of the Construction Traffic Management Plan, project construction activities are not expected to have a significant impact with respect to temporary traffic impacts at study area intersections and temporary access impacts.

TABLE F-1
CONSTRUCTION TRIP GENERATION

Construction Activity	Daily Trips	Morning Trips			Afternoon Trips		
		In	Out	Total	In	Out	Total
Site Preparation & Demolition - 3 months (August 2019 through October 2019)							
Worker Trips	20	10	0	10	0	10	10
Haul Trips [a]	318	16	16	32	16	16	32
Total Trips During Phase	**338**	**26**	**16**	**42**	**16**	**26**	**42**
Trenching - 3 months (August 2019 through October 2019)							
Worker Trips	20	10	0	10	0	10	10
Vendor Trips	8	1	0	1	0	1	1
Haul Trips [a]	4	0	0	0	0	0	0
Total Trips During Phase	**32**	**11**	**0**	**11**	**0**	**11**	**11**
Grading - 3 months (August 2019 through October 2019)							
Worker Trips	20	10	0	10	0	10	10
Haul Trips [a]	318	16	16	32	16	16	32
Total Trips During Phase	**338**	**26**	**16**	**42**	**16**	**26**	**42**
Pile Driving - 2 months (December 2019 through January 2020)							
Worker Trips	6	3	0	3	0	3	3
Total Trips During Phase [b]	**6**	**3**	**0**	**3**	**0**	**3**	**3**
Dynamic Compaction - 2 months (December 2019 through January 2020)							
Worker Trips	4	2	0	2	0	2	2
Total Trips During Phase	**4**	**2**	**0**	**2**	**0**	**2**	**2**
Construction - 7 months (October 2019 through March 2020)							
Worker Trips	80	40	0	40	0	40	40
Vendor Trips	12	1	0	1	0	1	1
Haul Trips [a]	8	1	0	1	0	1	1
Total Trips During Phase	**100**	**42**	**0**	**42**	**0**	**42**	**42**
Paving - 7 months (November 2019 through May 2020)							
Worker Trips	30	15	0	15	0	15	15
Haul Trips [a]	6	1	0	1	0	1	1
Total Trips During Phase	**36**	**16**	**0**	**16**	**0**	**16**	**16**
Architectural Coating - 2 months (May 2020 through June 2020)							
Worker Trips	30	15	0	15	0	15	15
Vendor Trips	4	2	0	2	0	2	2
Haul Trips [a,c]	2	0	0	0	0	0	0
Total Trips During Phase	**36**	**17**	**0**	**17**	**0**	**17**	**17**
Peak Activity Total [d]	**808**	**105**	**32**	**137**	**32**	**105**	**137**

Notes:
One month is assumed to be 22 workdays
[a] Haul Trips are multiplied by a factor of 2.0 Passengar Car Equivalency (PCE) based on information provided in HCM 6th Edition Exhibit 12-25.
[b] A total of 10 haul trips (5 inbound and 5 outbound) are anticipated to occur over the two month period. Since these trips would be distributed over a 44 day period, and less than one truck per day would visit the site, these were omitted from the number of daily trips
[c] A total of 44 haul trips (22 inbound and 22 outbound) are anticipated to occur over the two month period. Since these trips would b distributed over a 44 day period, and one truck per day would visit the site, these were omitted from the number of peak hour trips.
[d] The estimated preliminary peak construction period would occur in during the site preparation & demolition, trenching, grading, and paving phases. This total caculates the sum of these periods.

Appendix G

Signal Warrant Analysis

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

25. HAMILTON AVENUE & I-110 SOUTHBOUND OFF-RAMP

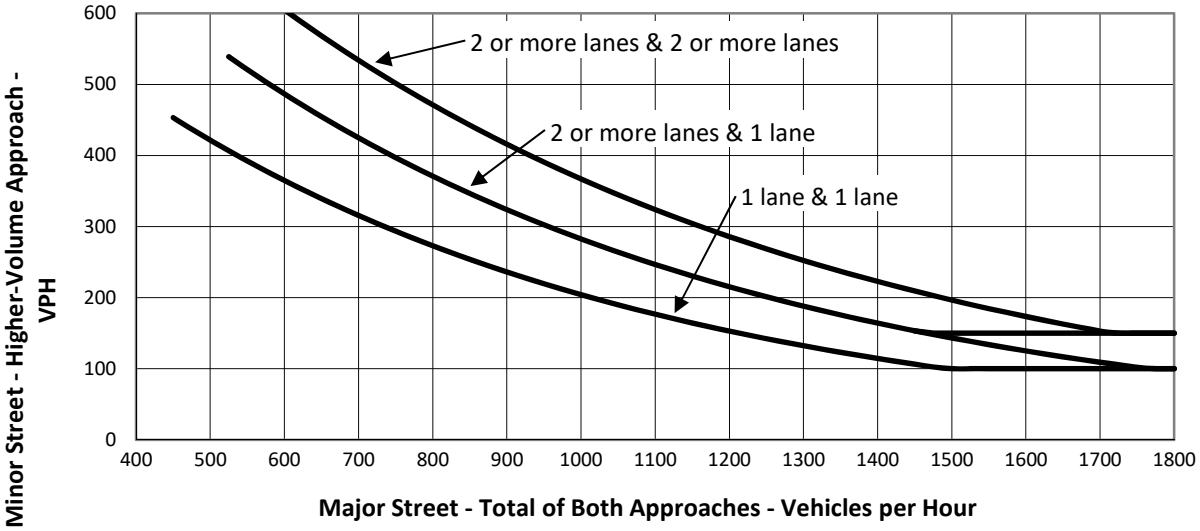
Major Street Name:	Hamilton Avenue	Vehicles per Hour (Peak Hour)	
Minor Street Name:	I-110 Southbound Off-Ramp	Major Street (Approach 1):	803
		Major Street (Approach 2):	595
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	398

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	803	Minimum Major Street Volume:	510
Major Street (Approach 2):	595	Satisfied?	YES
Total Major Street Volume:	1,398		
		Minimum Minor Street Volume:	165
Major Street Left Turns:	0	Satisfied?	YES
Minor Street (Higher Volume):	398		
Total Minor Street Volume:	398	Warrant 3 Satisfied?	**YES**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

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Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

29. MAIN STREET & BROADWAY

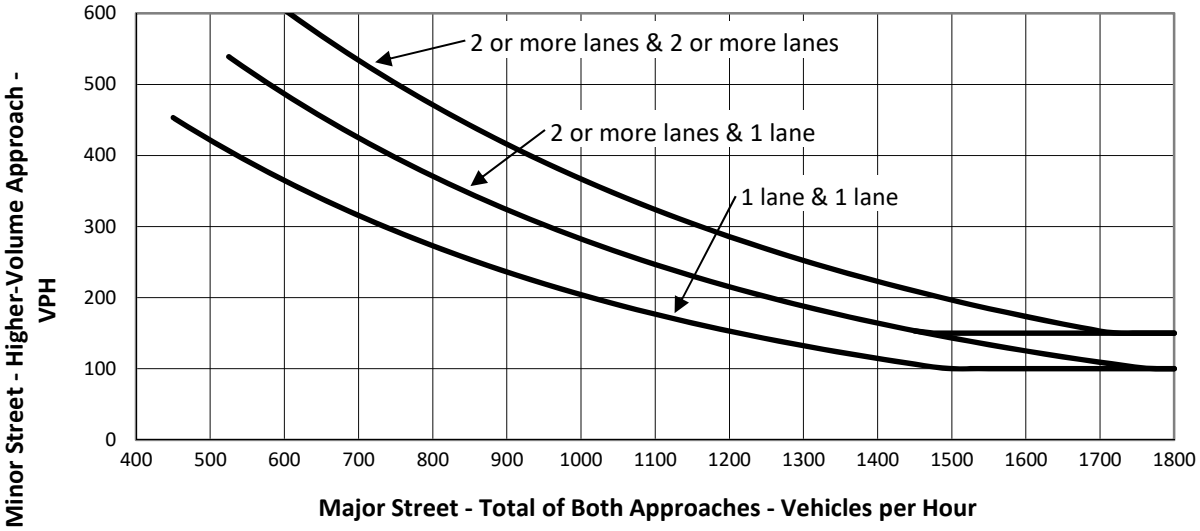
Major Street Name:	Main Street	Vehicles per Hour (Peak Hour)	
Minor Street Name:	Broadway	Major Street (Approach 1):	701
		Major Street (Approach 2):	0
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	215

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	701	Minimum Major Street Volume:	510
Major Street (Approach 2):	0	Satisfied?	YES
Total Major Street Volume:	701		
		Minimum Minor Street Volume:	424
Major Street Left Turns:	0	Satisfied?	NO
Minor Street (Higher Volume):	215		
Total Minor Street Volume:	215	Warrant 3 Satisfied?	**NO**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

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Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

25. HAMILTON AVENUE & I-110 SOUTHBOUND OFF-RAMP

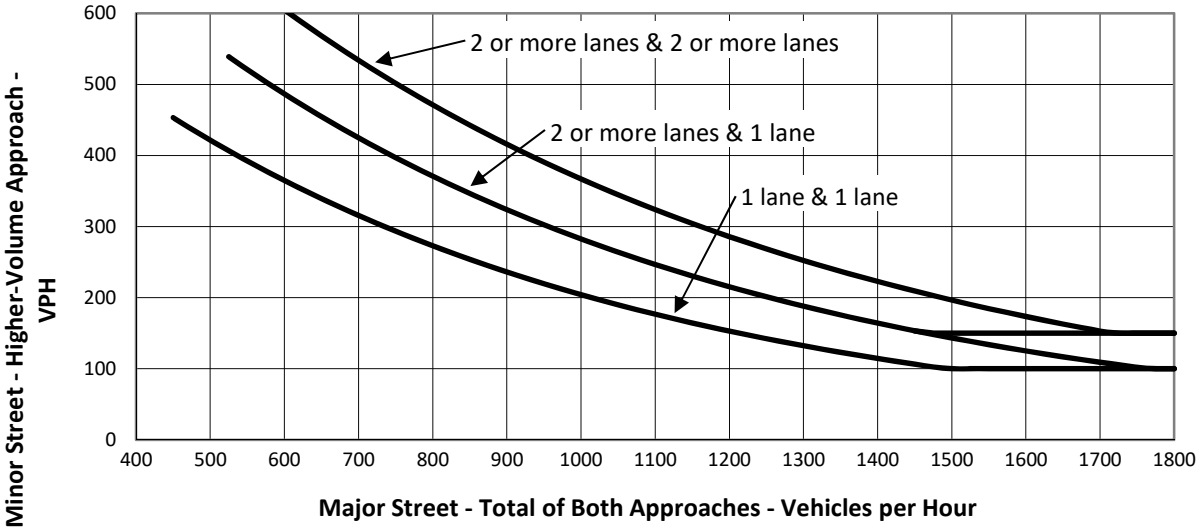
Major Street Name:	Hamilton Avenue	Vehicles per Hour (Peak Hour)	
Minor Street Name:	I-110 Southbound Off-Ramp	Major Street (Approach 1):	817
		Major Street (Approach 2):	595
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	398

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	817	Minimum Major Street Volume:	510
Major Street (Approach 2):	595	Satisfied?	YES
Total Major Street Volume:	1,412		
		Minimum Minor Street Volume:	161
Major Street Left Turns:	0	Satisfied?	YES
Minor Street (Higher Volume):	398		
Total Minor Street Volume:	398	Warrant 3 Satisfied?	**YES**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

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Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

29. MAIN STREET & BROADWAY

Major Street Name: Main Street
Minor Street Name: Broadway

Major Street Lanes: 2
Minor Street Lanes: 1

[b] Urban/Rural: Urban

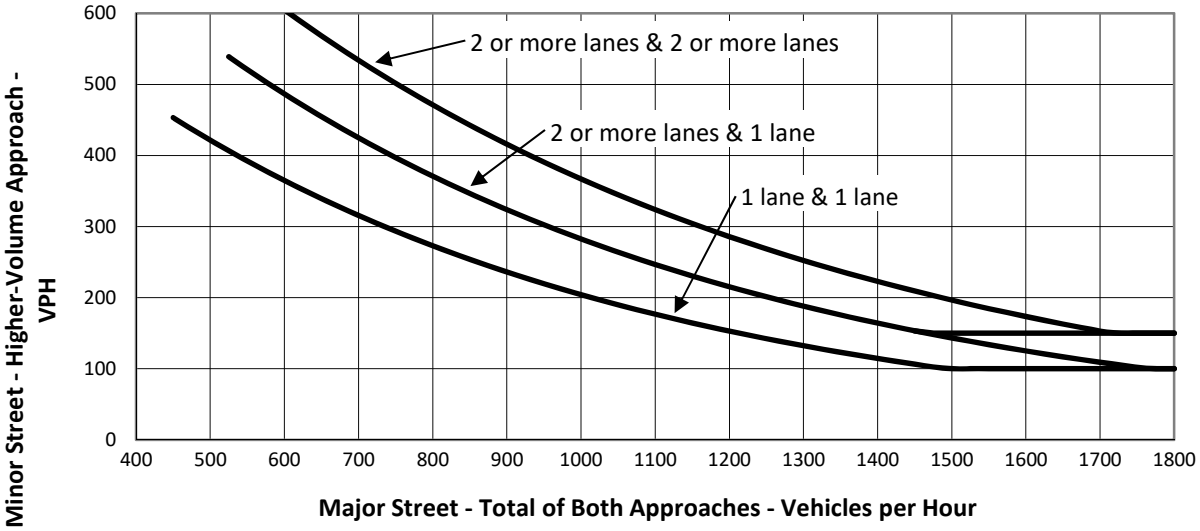
Vehicles per Hour (Peak Hour)	
Major Street (Approach 1):	742
Major Street (Approach 2):	0
[a] Major Street Left-Turns:	0
Minor Street (Higher Volume):	215

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	742
Major Street (Approach 2):	0
Total Major Street Volume:	742
Major Street Left Turns:	0
Minor Street (Higher Volume):	215
Total Minor Street Volume:	215

Minimum Major Street Volume:	510
Satisfied?	YES
Minimum Minor Street Volume:	401
Satisfied?	NO
Warrant 3 Satisfied?	**NO**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

25. HAMILTON AVENUE & I-110 SOUTHBOUND OFF-RAMP

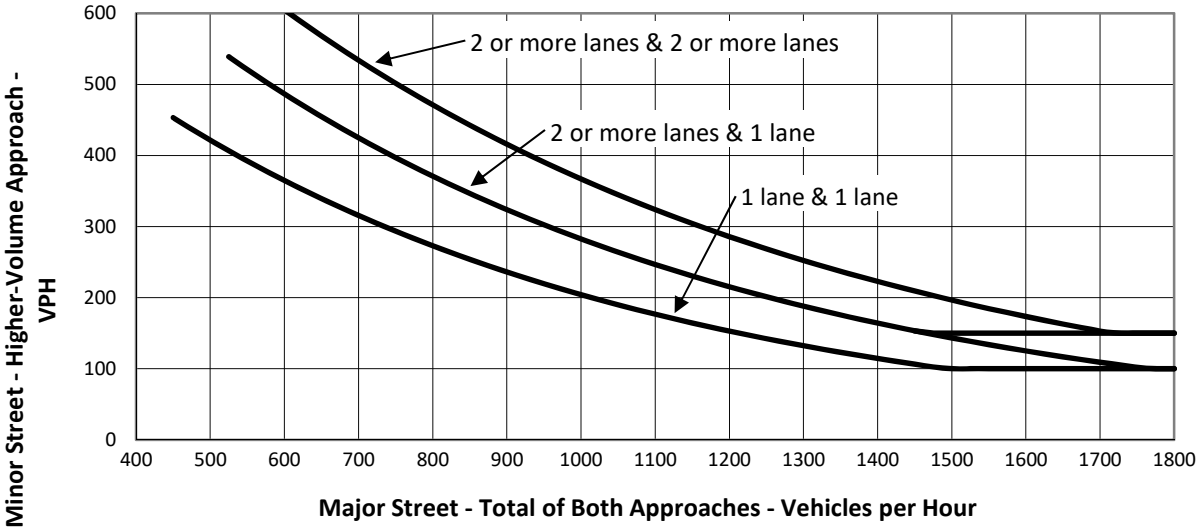
Major Street Name:	Hamilton Avenue	Vehicles per Hour (Peak Hour)	
Minor Street Name:	I-110 Southbound Off-Ramp	Major Street (Approach 1):	902
		Major Street (Approach 2):	595
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	591

[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	902	Minimum Major Street Volume:	510
Major Street (Approach 2):	595	Satisfied?	YES
Total Major Street Volume:	1,497		
		Minimum Minor Street Volume:	144
Major Street Left Turns:	0	Satisfied?	YES
Minor Street (Higher Volume):	591		
Total Minor Street Volume:	591	Warrant 3 Satisfied?	**YES**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Carol Kimmelman Sports and Academic Campus

Traffic Signal Warrant Analysis
Warrant 3, Peak Hour

29. MAIN STREET & BROADWAY

Major Street Name:	Main Street	Vehicles per Hour (Peak Hour)	
Minor Street Name:	Broadway	Major Street (Approach 1):	815
		Major Street (Approach 2):	0
Major Street Lanes:	2	[a] Major Street Left-Turns:	0
Minor Street Lanes:	1	Minor Street (Higher Volume):	215

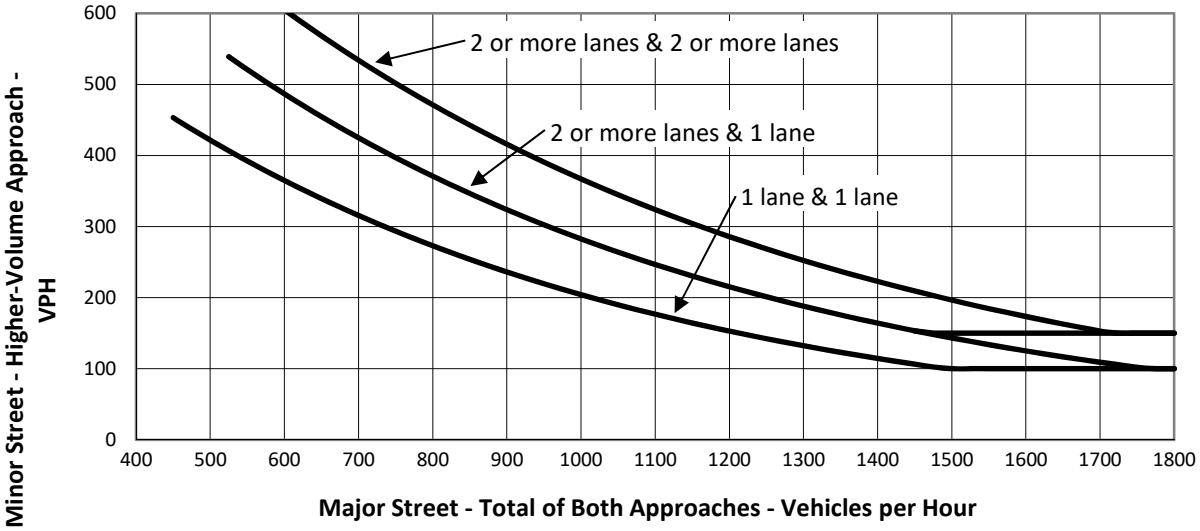
[b] Urban/Rural: Urban

Vehicles per Hour (Peak Hour)

Major Street (Approach 1):	815
Major Street (Approach 2):	0
Total Major Street Volume:	815
Major Street Left Turns:	0
Minor Street (Higher Volume):	215
Total Minor Street Volume:	215

Minimum Major Street Volume:	510
Satisfied?	YES
Minimum Minor Street Volume:	363
Satisfied?	NO
Warrant 3 Satisfied?	**NO**

Figure 4C-3. Warrant 3, Peak Hour [c]



[a] Major street left-turn volume is added to minor street volume if a protected left-turn signal phase is proposed.

[b] Setting to "Rural" reduces minimum test volumes to approximately 70% of "Urban" test volumes. This may be used when major street speed exceeds 40 mph or in an isolated community of less than 10,000 residents.

[c] From *California Manual on Uniform Traffic Control Devices, 2014 Edition;* Caltrans.

Appendix H

Caltrans Analysis

Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	657	0	0	724	70	0	0	0	87	324	232
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	657	0	0	724	70	0	0	0	87	324	232
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	164	0	0	181	18	0	0	0	22	81	58
Total Analysis Volume [veh/h]	28	657	0	0	724	70	0	0	0	87	324	232
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	9	35	0	0	26	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	35	35	35	35		35	35
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	17	11	11		10	10
g / C, Green / Cycle	0.03	0.47	0.31	0.31		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.02	0.18	0.21	0.22		0.19	0.19
s, saturation flow rate [veh/h]	1781	3560	1870	1814		1847	1491
c, Capacity [veh/h]	62	1669	575	557		514	414
d1, Uniform Delay [s]	16.82	6.15	10.83	10.92		11.46	11.50
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.03	0.15	1.50	1.71		1.66	2.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.39	0.69	0.71		0.69	0.70
d, Delay for Lane Group [s/veh]	21.85	6.30	12.32	12.62		13.12	13.63
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.27	0.98	2.22	2.26		2.08	1.76
50th-Percentile Queue Length [ft]	6.87	24.47	55.52	56.57		52.08	44.00
95th-Percentile Queue Length [veh]	0.49	1.76	4.00	4.07		3.75	3.17
95th-Percentile Queue Length [ft]	12.36	44.04	99.94	101.83		93.75	79.21

Movement, Approach, & Intersection Results

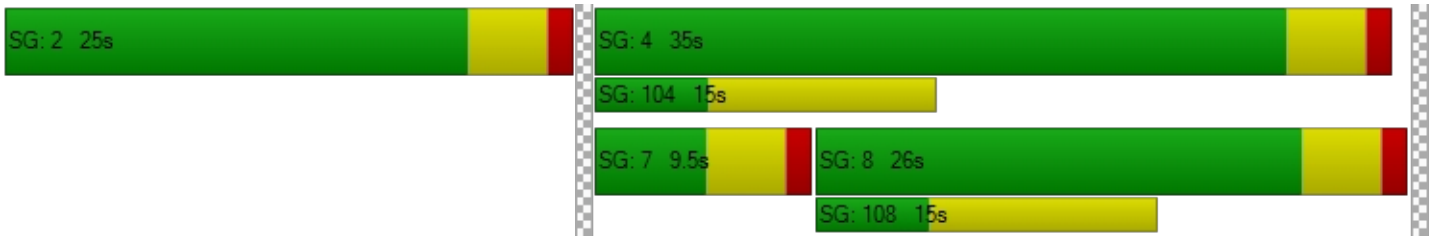
d_M, Delay for Movement [s/veh]	21.85	6.30	0.00	0.00	12.46	12.62	0.00	0.00	0.00	13.12	13.21	13.63
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	6.94			12.47			0.00			13.35		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	10.95											
Intersection LOS	B											
Intersection V/C	0.649											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.901	2.009
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	717	0	683
d_b, Bicycle Delay [s]	7.25	12.35	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.125	2.215	4.132	2.090
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.547

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	599	52	146	723	0	29	71	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	599	52	146	723	0	29	71	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	150	13	37	181	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	599	52	146	723	0	29	71	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	19	0	22	41	0	0	19	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	28	28	28	28	28	28	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	8	8	3	16	3	3	
g / C, Green / Cycle	0.28	0.28	0.12	0.57	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.17	0.18	0.08	0.20	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1819	1781	3560	1781	1798	
c, Capacity [veh/h]	531	517	221	2023	198	200	
d1, Uniform Delay [s]	8.71	8.77	11.74	3.29	11.27	11.68	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.15	1.27	3.38	0.11	0.34	1.64	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.61	0.63	0.66	0.36	0.15	0.46	
d, Delay for Lane Group [s/veh]	9.87	10.04	15.12	3.39	11.61	13.33	
Lane Group LOS	A	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.23	1.24	0.83	0.25	0.14	0.48	
50th-Percentile Queue Length [ft]	30.65	31.12	20.76	6.13	3.42	12.02	
95th-Percentile Queue Length [veh]	2.21	2.24	1.49	0.44	0.25	0.87	
95th-Percentile Queue Length [ft]	55.16	56.02	37.37	11.04	6.16	21.63	

Movement, Approach, & Intersection Results

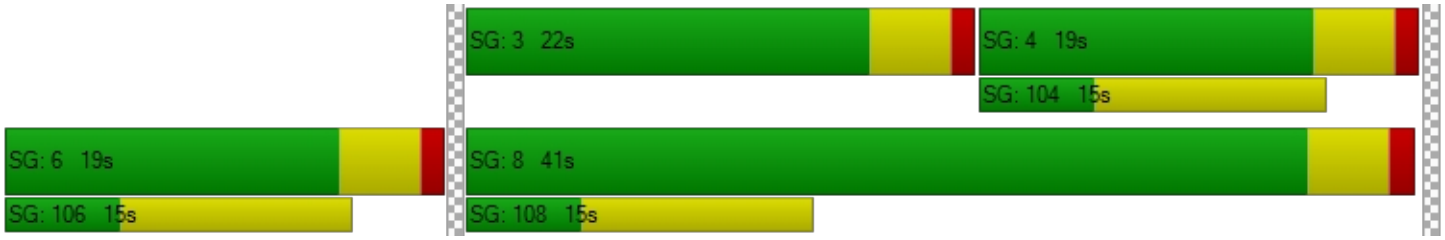
d_M, Delay for Movement [s/veh]	0.00	9.94	10.04	15.12	3.39	0.00	11.61	13.33	13.33	0.00	0.00	0.00
Movement LOS		A	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]	9.95			5.36			12.91			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.74											
Intersection LOS	A											
Intersection V/C	0.547											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.452	0.000	1.755	1.666
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	1217	483	0
d_b, Bicycle Delay [s]	17.25	4.60	17.25	30.00
l_b,int, Bicycle LOS Score for Intersection	2.097	2.277	1.759	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	912	160	177	1088	334	600
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	912	160	177	1088	334	600
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	228	40	44	272	84	150
Total Analysis Volume [veh/h]	912	160	177	1088	334	600
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	37	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	17	17	11	11	11
g / C, Green / Cycle	0.46	0.46	0.46	0.46	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.18	0.10	0.15	0.21	0.18	0.19	0.19
s, saturation flow rate [veh/h]	5094	1589	1188	5094	1781	1600	1589
c, Capacity [veh/h]	2344	731	542	2344	530	476	473
d1, Uniform Delay [s]	6.59	6.02	10.90	6.88	11.14	11.36	11.38
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.15	0.35	0.14	1.07	1.50	1.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.22	0.33	0.46	0.59	0.65	0.65
d, Delay for Lane Group [s/veh]	6.70	6.17	11.25	7.03	12.21	12.87	12.92
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.01	0.50	0.48	1.26	1.83	1.88	1.88
50th-Percentile Queue Length [ft]	25.20	12.59	12.04	31.44	45.83	46.96	47.04
95th-Percentile Queue Length [veh]	1.81	0.91	0.87	2.26	3.30	3.38	3.39
95th-Percentile Queue Length [ft]	45.35	22.65	21.68	56.60	82.49	84.52	84.67

Movement, Approach, & Intersection Results

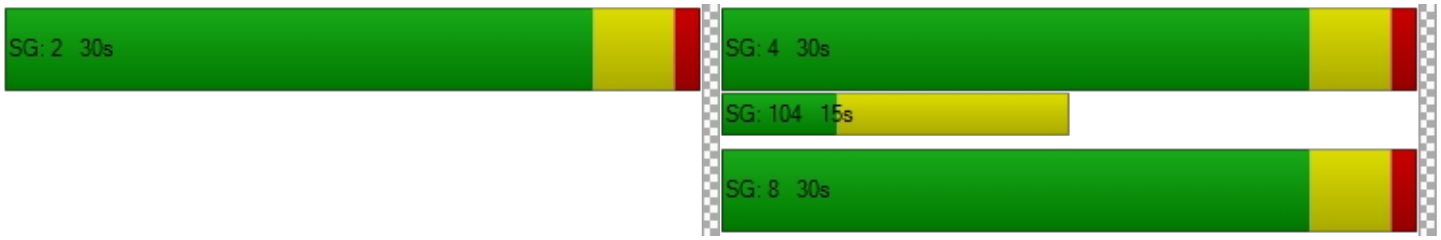
d_M, Delay for Movement [s/veh]	6.70	6.17	11.25	7.03	12.25	12.89
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.62		7.62		12.66	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.73					
Intersection LOS	A					
Intersection V/C	0.520					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.780
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.722	4.828	5.674
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	414	1117	0	0	769	257	0	0	0	66	0	420
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	414	1117	0	0	769	257	0	0	0	66	0	420
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	279	0	0	192	64	0	0	0	17	0	105
Total Analysis Volume [veh/h]	414	1117	0	0	769	257	0	0	0	66	0	420
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	0	19	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	30	30	30		30	30
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	19	8		2	2
g / C, Green / Cycle	0.21	0.63	0.27		0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.12	0.31	0.15		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	722	2248	1396		128	128
d1, Uniform Delay [s]	10.77	3.00	9.41		13.31	13.31
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.72	0.17	0.34		1.06	1.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.50	0.55		0.26	0.26
d, Delay for Lane Group [s/veh]	11.49	3.17	9.75		14.37	14.37
Lane Group LOS	B	A	A		B	B
Critical Lane Group	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.96	0.23	1.01		0.20	0.20
50th-Percentile Queue Length [ft]	23.91	5.67	25.35		5.07	5.07
95th-Percentile Queue Length [veh]	1.72	0.41	1.82		0.36	0.36
95th-Percentile Queue Length [ft]	43.04	10.21	45.62		9.12	9.12

Movement, Approach, & Intersection Results

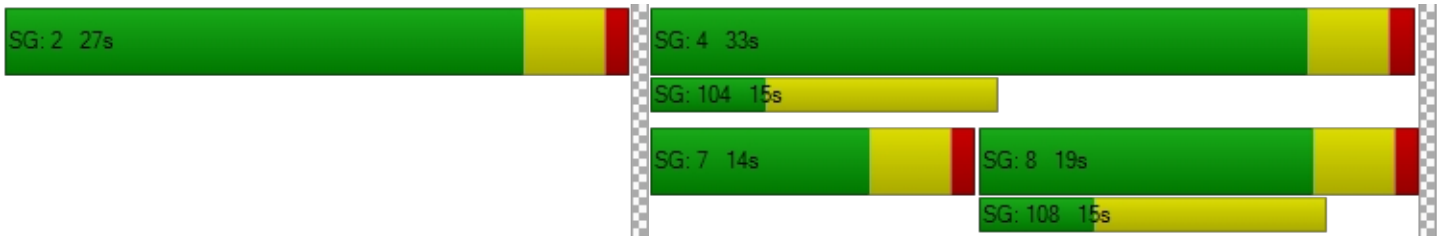
d_M, Delay for Movement [s/veh]	11.49	3.17	0.00	0.00	9.75	0.00	0.00	0.00	0.00	14.37	14.37	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.42			9.75			0.00			14.37		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.08											
Intersection LOS	A											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.897	1.942
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	950	483	0	750
d_b, Bicycle Delay [s]	8.27	17.25	30.00	11.72
l_b,int, Bicycle LOS Score for Intersection	2.823	1.983	4.132	1.669
Bicycle LOS	C	A	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1015	100	0	570	268	442	13	554	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1015	100	0	570	268	442	13	554	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	254	25	0	143	67	111	3	139	0	0	0
Total Analysis Volume [veh/h]	0	1015	100	0	570	268	442	13	554	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	9	28	0	0	19	0	0	32	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	27	27	27	27	27	27	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	12	12	7	6	6	
g / C, Green / Cycle	0.00	0.43	0.43	0.27	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.30	0.30	0.16	0.13	0.00	
s, saturation flow rate [veh/h]	1781	1870	1812	3560	3459	3560	
c, Capacity [veh/h]	1	813	787	952	803	827	
d1, Uniform Delay [s]	0.00	6.19	6.19	8.63	9.13	7.99	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	1.09	1.13	0.61	0.59	0.01	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.70	0.70	0.60	0.55	0.02	
d, Delay for Lane Group [s/veh]	0.00	7.28	7.32	9.24	9.72	8.00	
Lane Group LOS	A	A	A	A	A	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.33	1.30	0.96	0.79	0.02	
50th-Percentile Queue Length [ft]	0.00	33.35	32.54	23.99	19.69	0.49	
95th-Percentile Queue Length [veh]	0.00	2.40	2.34	1.73	1.42	0.04	
95th-Percentile Queue Length [ft]	0.00	60.02	58.56	43.19	35.44	0.88	

Movement, Approach, & Intersection Results

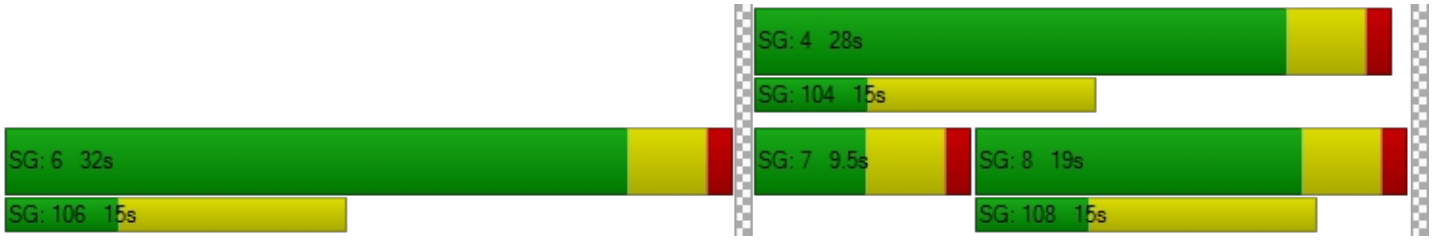
d_M, Delay for Movement [s/veh]	0.00	7.30	7.32	0.00	9.24	0.00	9.72	8.00	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		A	A				
d_A, Approach Delay [s/veh]		7.30			9.24			9.67			0.00	
Approach LOS		A			A			A			A	
d_I, Intersection Delay [s/veh]	8.32											
Intersection LOS	A											
Intersection V/C	0.779											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.609	0.000	2.507	1.751
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	483	917	0
d_b, Bicycle Delay [s]	11.10	17.25	8.80	30.00
l_b,int, Bicycle LOS Score for Intersection	2.479	2.030	1.935	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	533	93	65	486	0	0	0	0	461	0	405
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	533	93	65	486	0	0	0	0	461	0	405
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	133	23	16	122	0	0	0	0	115	0	101
Total Analysis Volume [veh/h]	0	533	93	65	486	0	0	0	0	461	0	405
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	9	22	0	9	22	0	0	0	0	29	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	39	39	39	39	39		39	39
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	12		13	13
g / C, Green / Cycle	0.00	0.25	0.25	0.07	0.31		0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00	0.17	0.17	0.04	0.14		0.26	0.25
s, saturation flow rate [veh/h]	1781	1870	1775	1781	3560		1781	1589
c, Capacity [veh/h]	0	463	439	117	1114		612	547
d1, Uniform Delay [s]	0.00	13.45	13.47	17.83	10.76		11.43	11.37
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	1.86	2.00	4.05	0.27		1.90	2.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.69	0.70	0.55	0.44		0.75	0.74
d, Delay for Lane Group [s/veh]	0.00	15.31	15.47	21.88	11.03		13.34	13.37
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.29	2.21	0.62	1.34		2.98	2.62
50th-Percentile Queue Length [ft]	0.00	57.31	55.20	15.59	33.42		74.42	65.56
95th-Percentile Queue Length [veh]	0.00	4.13	3.97	1.12	2.41		5.36	4.72
95th-Percentile Queue Length [ft]	0.00	103.16	99.37	28.06	60.16		133.96	118.00

Movement, Approach, & Intersection Results

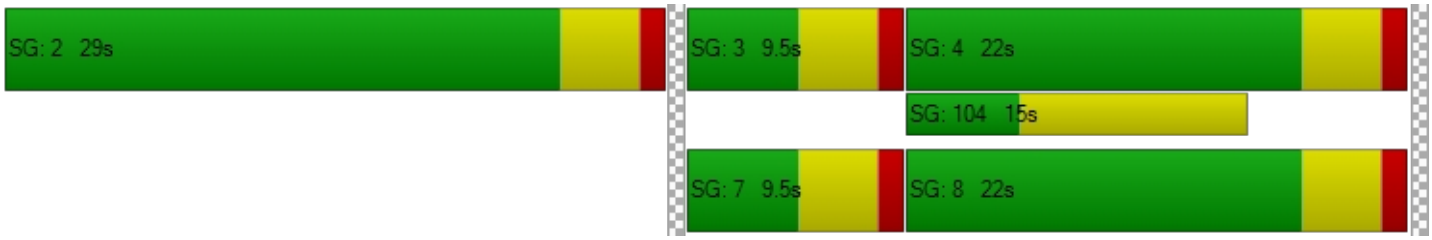
d_M, Delay for Movement [s/veh]	0.00	15.38	15.47	21.88	11.03	0.00	0.00	0.00	0.00	13.34	0.00	13.37
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	15.39			12.31			0.00			13.35		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.70											
Intersection LOS	B											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.254
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.076	2.014	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	158	810	0	0	555	198
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	158	810	0	0	555	198
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	40	203	0	0	139	50
Total Analysis Volume [veh/h]	0	0	0	0	0	0	158	810	0	0	555	198
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	11	0	0	0	0	19	40	0	9	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	10	10	0	7	7
g / C, Green / Cycle	0.00		0.14	0.43	0.43	0.00	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.22	0.22	0.00	0.16	0.12
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		480	807	807	1	1045	466
d1, Uniform Delay [s]	0.00		9.25	4.91	4.91	0.00	7.04	6.79
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.40	0.48	0.48	0.00	0.42	0.61
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.33	0.50	0.50	0.00	0.53	0.42
d, Delay for Lane Group [s/veh]	0.00		9.65	5.39	5.39	0.00	7.46	7.40
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.26	0.56	0.56	0.00	0.65	0.48
50th-Percentile Queue Length [ft]	0.00		6.45	13.96	13.96	0.00	16.13	12.03
95th-Percentile Queue Length [veh]	0.00		0.46	1.00	1.00	0.00	1.16	0.87
95th-Percentile Queue Length [ft]	0.00		11.61	25.12	25.12	0.00	29.03	21.66

Movement, Approach, & Intersection Results

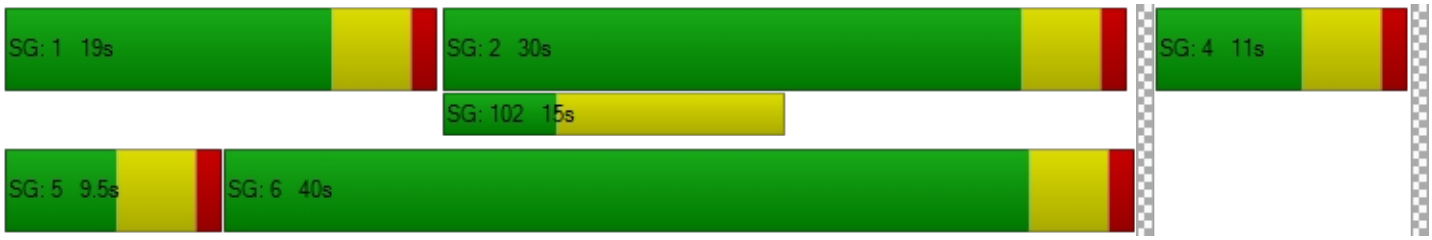
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.65	5.39	5.39	0.00	7.46	7.40
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.09			7.44		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.68											
Intersection LOS	A											
Intersection V/C	0.438											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.869	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	217	0	1183	850
d_b, Bicycle Delay [s]	23.85	30.00	5.00	9.92
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.358	2.181
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	228	718	0	704	580	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	228	718	0	704	580	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	180	0	176	145	0
Total Analysis Volume [veh/h]	228	718	0	704	580	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	40	0	0	20	20	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	21	21	11	11
g / C, Green / Cycle	0.51	0.51	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.13	0.45	0.20	0.11
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	914	816	966	1382
d1, Uniform Delay [s]	5.67	9.02	13.81	12.51
k, delay calibration	0.11	0.17	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.14	5.07	1.07	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.88	0.73	0.42
d, Delay for Lane Group [s/veh]	5.81	14.09	14.89	12.71
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	0.75	4.74	2.57	1.23
50th-Percentile Queue Length [ft]	18.85	118.62	64.37	30.87
95th-Percentile Queue Length [veh]	1.36	8.32	4.63	2.22
95th-Percentile Queue Length [ft]	33.93	207.92	115.86	55.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.81	14.09	0.00	14.89	12.71	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	12.10		14.89		12.71	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	13.14					
Intersection LOS	B					
Intersection V/C	0.804					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.157	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.713	4.451
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.976

Intersection Setup

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Ave		Hamilton Ave		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	331	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	331	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	83	24	191	59
Total Analysis Volume [veh/h]	79	110	331	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	502	451	483	511	555
Degree of Utilization, x	0.17	0.22	0.73	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	5.93	0.73	12.95	10.60
95th-Percentile Queue Length [ft]	15.54	20.74	148.13	18.14	323.64	264.99
Approach Delay [s/veh]	12.05		25.71		51.35	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	39.97					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	657	599	411	126	549	223
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	657	599	411	126	549	223
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	164	150	103	32	137	56
Total Analysis Volume [veh/h]	657	599	411	126	549	223
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	19	38	19	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	13	25	8	8	14	14
g / C, Green / Cycle	0.26	0.52	0.17	0.17	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.19	0.17	0.12	0.08	0.22	0.23
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1663
c, Capacity [veh/h]	890	1866	622	278	519	484
d1, Uniform Delay [s]	16.61	6.64	18.79	18.05	15.74	15.85
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.22	0.10	1.21	1.16	2.34	2.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.32	0.66	0.45	0.76	0.78
d, Delay for Lane Group [s/veh]	17.83	6.74	20.00	19.21	18.08	18.59
Lane Group LOS	B	A	B	B	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	3.05	1.30	2.03	1.22	3.74	3.64
50th-Percentile Queue Length [ft]	76.32	32.58	50.65	30.53	93.39	90.88
95th-Percentile Queue Length [veh]	5.50	2.35	3.65	2.20	6.72	6.54
95th-Percentile Queue Length [ft]	137.38	58.65	91.18	54.96	168.11	163.58

Movement, Approach, & Intersection Results

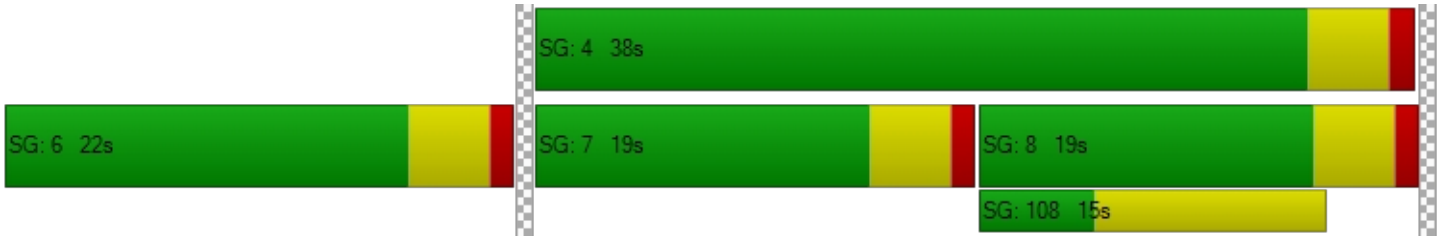
d_M, Delay for Movement [s/veh]	17.83	6.74	20.00	19.21	18.23	18.59
Movement LOS	B	A	B	B	B	B
d_A, Approach Delay [s/veh]	12.54		19.81		18.33	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	15.81					
Intersection LOS	B					
Intersection V/C	0.706					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.491
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	5.169	4.575	5.406
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	278	226	275	328	495	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	226	275	328	495	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	57	69	82	124	22
Total Analysis Volume [veh/h]	278	226	275	328	495	88
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	8	8	5	18	9	9
g / C, Green / Cycle	0.23	0.23	0.14	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.14	0.08	0.09	0.16	0.16
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	417	373	496	1829	457	434
d1, Uniform Delay [s]	12.41	12.21	14.24	4.65	12.09	12.21
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.83	1.59	0.97	0.05	1.49	1.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.61	0.55	0.18	0.64	0.67
d, Delay for Lane Group [s/veh]	14.24	13.80	15.21	4.70	13.57	14.02
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.76	1.40	0.90	0.36	1.77	1.82
50th-Percentile Queue Length [ft]	43.93	35.01	22.54	9.00	44.36	45.50
95th-Percentile Queue Length [veh]	3.16	2.52	1.62	0.65	3.19	3.28
95th-Percentile Queue Length [ft]	79.07	63.01	40.56	16.20	79.84	81.90

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.24	13.80	15.21	4.70	13.76	14.02
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.04		9.49		13.80	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.34					
Intersection LOS	B					
Intersection V/C	0.603					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.323	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.630	4.613
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.743

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	674	0	0	1235	92	0	0	0	61	121	236
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	674	0	0	1235	92	0	0	0	61	121	236
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	169	0	0	309	23	0	0	0	15	30	59
Total Analysis Volume [veh/h]	21	674	0	0	1235	92	0	0	0	61	121	236
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	43	0	0	33	0	0	0	0	0	17	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	44	44	44	44		44	44
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	25	19	19		10	10
g / C, Green / Cycle	0.03	0.57	0.44	0.44		0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.01	0.19	0.35	0.36		0.10	0.16
s, saturation flow rate [veh/h]	1781	3560	1870	1825		1839	1446
c, Capacity [veh/h]	47	2039	830	810		408	321
d1, Uniform Delay [s]	21.01	4.93	10.50	10.64		14.72	15.85
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.64	0.09	1.83	2.12		0.77	3.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.33	0.80	0.82		0.45	0.74
d, Delay for Lane Group [s/veh]	27.65	5.02	12.33	12.76		15.49	19.14
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.28	0.98	4.40	4.50		1.41	2.14
50th-Percentile Queue Length [ft]	6.89	24.54	109.88	112.59		35.28	53.55
95th-Percentile Queue Length [veh]	0.50	1.77	7.83	7.98		2.54	3.86
95th-Percentile Queue Length [ft]	12.41	44.17	195.83	199.60		63.50	96.39

Movement, Approach, & Intersection Results

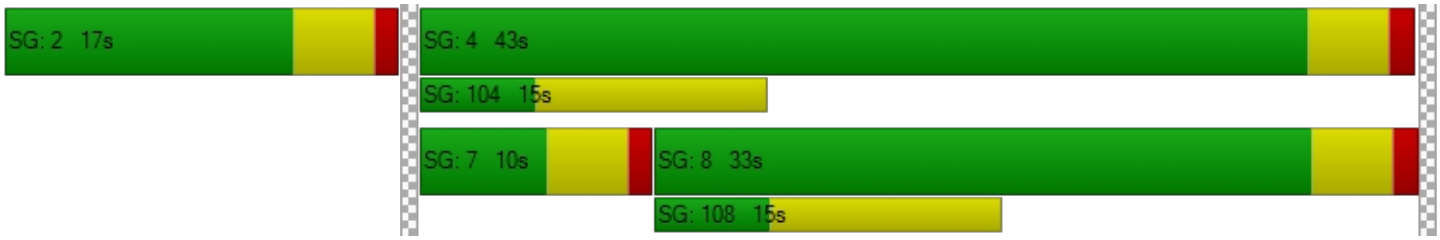
d_M, Delay for Movement [s/veh]	27.65	5.02	0.00	0.00	12.53	12.76	0.00	0.00	0.00	15.49	15.49	19.14
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	5.71			12.54			0.00			17.55		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.45											
Intersection LOS	B											
Intersection V/C	0.743											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.810	1.899
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1283	950	0	417
d_b, Bicycle Delay [s]	3.85	8.27	30.00	18.80
l_b,int, Bicycle LOS Score for Intersection	2.133	2.654	4.132	1.904
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	13.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	639	109	272	1025	0	61	276	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	639	109	272	1025	0	61	276	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	160	27	68	256	0	15	69	11	0	0	0
Total Analysis Volume [veh/h]	0	639	109	272	1025	0	61	276	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	45	45	45	45	45	45	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	13	13	9	26	10	10	
g / C, Green / Cycle	0.28	0.28	0.20	0.57	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.21	0.15	0.29	0.03	0.17	
s, saturation flow rate [veh/h]	1870	1779	1781	3560	1781	1827	
c, Capacity [veh/h]	519	494	352	2047	402	413	
d1, Uniform Delay [s]	14.73	14.92	17.17	5.73	14.02	16.39	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.90	2.40	3.64	0.19	0.17	3.07	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.72	0.76	0.77	0.50	0.15	0.77	
d, Delay for Lane Group [s/veh]	16.63	17.32	20.81	5.92	14.19	19.46	
Lane Group LOS	B	B	C	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	3.15	3.25	2.65	1.81	0.45	2.97	
50th-Percentile Queue Length [ft]	78.80	81.13	66.37	45.24	11.23	74.30	
95th-Percentile Queue Length [veh]	5.67	5.84	4.78	3.26	0.81	5.35	
95th-Percentile Queue Length [ft]	141.85	146.04	119.46	81.44	20.21	133.73	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.92	17.32	20.81	5.92	0.00	14.19	19.46	19.46	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	B	B			
d_A, Approach Delay [s/veh]	16.98			9.05			18.61			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	12.99											
Intersection LOS	B											
Intersection V/C	0.732											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.554	0.000	1.880	2.045
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.177	2.630	2.185	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.500

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1180	217	163	1058	354	449
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1180	217	163	1058	354	449
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	295	54	41	265	89	112
Total Analysis Volume [veh/h]	1180	217	163	1058	354	449
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	34	0	0	34	26	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	38	38	38	38	38	38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	19	19	10	10	10
g / C, Green / Cycle	0.51	0.51	0.51	0.51	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.23	0.14	0.18	0.21	0.16	0.16	0.16
s, saturation flow rate [veh/h]	5094	1589	923	5094	1781	1640	1589
c, Capacity [veh/h]	2585	807	476	2585	459	423	410
d1, Uniform Delay [s]	6.05	5.38	10.99	5.87	12.51	12.59	12.62
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.18	0.42	0.10	1.30	1.53	1.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.27	0.34	0.41	0.61	0.63	0.63
d, Delay for Lane Group [s/veh]	6.18	5.56	11.42	5.97	13.81	14.12	14.25
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.22	0.63	0.46	1.06	1.81	1.76	1.74
50th-Percentile Queue Length [ft]	30.60	15.65	11.60	26.58	45.34	43.97	43.46
95th-Percentile Queue Length [veh]	2.20	1.13	0.84	1.91	3.26	3.17	3.13
95th-Percentile Queue Length [ft]	55.09	28.16	20.89	47.84	81.62	79.14	78.23

Movement, Approach, & Intersection Results

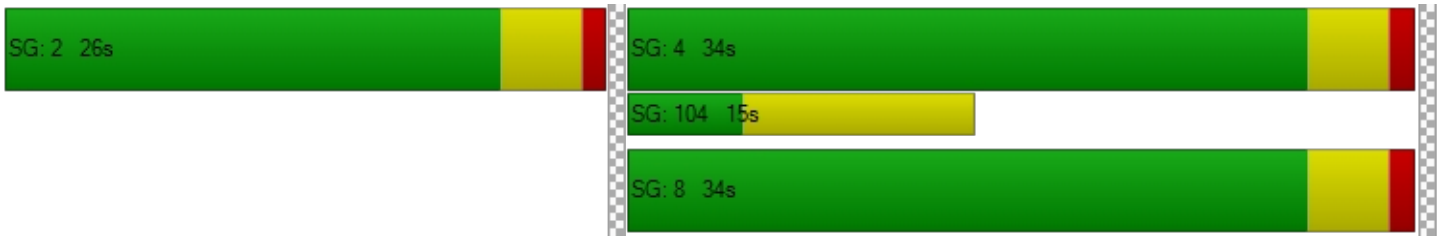
d_M, Delay for Movement [s/veh]	6.18	5.56	11.42	5.97	13.88	14.20
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.08		6.70		14.05	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.17					
Intersection LOS	A					
Intersection V/C	0.500					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.743
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.901	4.804	5.457
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	301	1080	0	0	1333	481	0	0	0	82	2	386
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	301	1080	0	0	1333	481	0	0	0	82	2	386
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	270	0	0	333	120	0	0	0	21	1	97
Total Analysis Volume [veh/h]	301	1080	0	0	1333	481	0	0	0	82	2	386
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	26	16		3	3
g / C, Green / Cycle	0.15	0.68	0.41		0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.30	0.26		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1785
c, Capacity [veh/h]	523	2432	2104		140	140
d1, Uniform Delay [s]	14.91	2.72	8.82		16.42	16.42
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.01	0.13	0.32		1.19	1.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.44	0.63		0.30	0.30
d, Delay for Lane Group [s/veh]	15.91	2.85	9.14		17.61	17.61
Lane Group LOS	B	A	A		B	B
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.06	0.38	2.03		0.34	0.34
50th-Percentile Queue Length [ft]	26.56	9.50	50.63		8.42	8.42
95th-Percentile Queue Length [veh]	1.91	0.68	3.65		0.61	0.61
95th-Percentile Queue Length [ft]	47.81	17.10	91.13		15.16	15.16

Movement, Approach, & Intersection Results

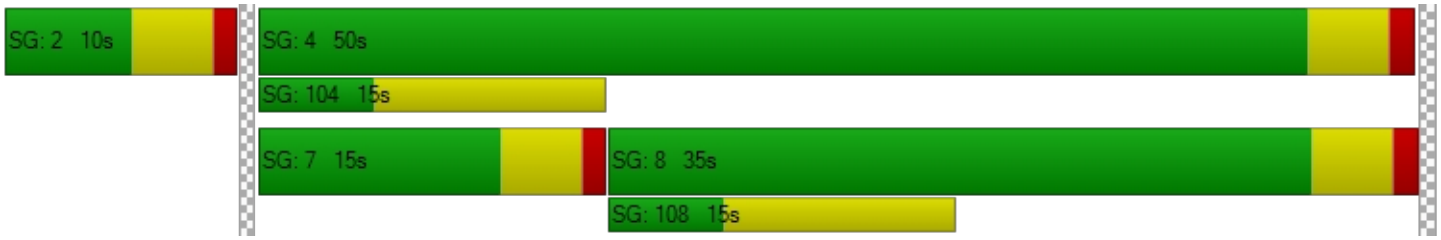
d_M, Delay for Movement [s/veh]	15.91	2.85	0.00	0.00	9.14	0.00	0.00	0.00	0.00	17.61	17.61	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.70			9.14			0.00			17.61		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.69											
Intersection LOS	A											
Intersection V/C	0.546											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.843	1.948
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.699	2.293	4.132	1.698
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1101	181	0	1055	364	245	169	345	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1101	181	0	1055	364	245	169	345	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	275	45	0	264	91	61	42	86	0	0	0
Total Analysis Volume [veh/h]	0	1101	181	0	1055	364	245	169	345	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	32	32	32	32	32	32	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	18	18	13	5	5	
g / C, Green / Cycle	0.00	0.56	0.56	0.42	0.16	0.16	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.30	0.07	0.05	
s, saturation flow rate [veh/h]	1781	1870	1779	3560	3459	3560	
c, Capacity [veh/h]	1	1048	997	1492	544	560	
d1, Uniform Delay [s]	0.00	4.74	4.75	7.65	12.19	11.89	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	0.62	0.66	0.63	0.59	0.30	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.63	0.63	0.71	0.45	0.30	
d, Delay for Lane Group [s/veh]	0.00	5.36	5.41	8.27	12.77	12.19	
Lane Group LOS	A	A	A	A	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.19	1.15	1.82	0.64	0.43	
50th-Percentile Queue Length [ft]	0.00	29.64	28.66	45.40	16.12	10.69	
95th-Percentile Queue Length [veh]	0.00	2.13	2.06	3.27	1.16	0.77	
95th-Percentile Queue Length [ft]	0.00	53.35	51.59	81.72	29.01	19.23	

Movement, Approach, & Intersection Results

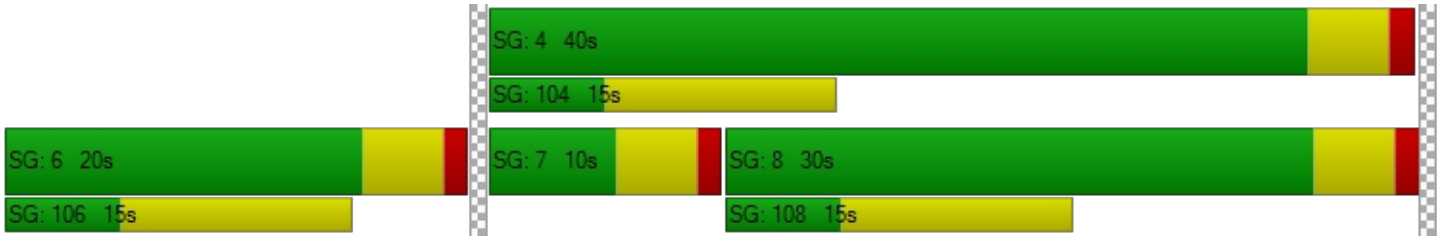
d_M, Delay for Movement [s/veh]	0.00	5.38	5.41	0.00	8.27	0.00	12.77	12.19	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		B	B				
d_A, Approach Delay [s/veh]	5.38			8.27			12.54			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.57											
Intersection LOS	A											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.736	0.000	2.501	1.866
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.617	2.430	1.901	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	12.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.665

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	574	98	108	726	0	0	0	0	240	0	326
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	574	98	108	726	0	0	0	0	240	0	326
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	144	25	27	182	0	0	0	0	60	0	82
Total Analysis Volume [veh/h]	1	574	98	108	726	0	0	0	0	240	0	326
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	24	0	11	25	0	0	0	0	25	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	37	37	37	37	37		37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	13		10	10
g / C, Green / Cycle	0.00	0.26	0.26	0.09	0.35		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.18	0.18	0.06	0.20		0.13	0.21
s, saturation flow rate [veh/h]	1781	1870	1776	1781	3560		1781	1589
c, Capacity [veh/h]	3	496	471	163	1265		501	447
d1, Uniform Delay [s]	18.60	12.33	12.35	16.39	9.74		11.14	12.12
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	60.26	1.75	1.86	4.54	0.41		0.71	2.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.69	0.70	0.66	0.57		0.48	0.73
d, Delay for Lane Group [s/veh]	78.86	14.08	14.21	20.93	10.15		11.85	14.43
Lane Group LOS	E	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.22	2.14	0.95	1.79		1.36	2.15
50th-Percentile Queue Length [ft]	1.39	55.55	53.44	23.81	44.87		33.97	53.70
95th-Percentile Queue Length [veh]	0.10	4.00	3.85	1.71	3.23		2.45	3.87
95th-Percentile Queue Length [ft]	2.49	99.99	96.18	42.86	80.76		61.14	96.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	78.86	14.13	14.21	20.93	10.15	0.00	0.00	0.00	0.00	11.85	0.00	14.43
Movement LOS	E	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.24			11.55			0.00			13.33		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	12.91											
Intersection LOS	B											
Intersection V/C	0.665											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.172
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	683	0	0
d_b, Bicycle Delay [s]	13.67	13.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.115	2.248	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.543

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	435	1188	0	0	676	241
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	435	1188	0	0	676	241
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	109	297	0	0	169	60
Total Analysis Volume [veh/h]	0	0	0	0	0	0	435	1188	0	0	676	241
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	0	0	12	22	0	10	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	29		29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		6	15	15	0	9	9
g / C, Green / Cycle	0.00		0.22	0.53	0.53	0.00	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.32	0.32	0.00	0.19	0.15
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		762	999	999	0	1119	499
d1, Uniform Delay [s]	0.00		10.09	4.61	4.61	0.00	8.42	8.04
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.68	0.57	0.57	0.00	0.53	0.72
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.57	0.59	0.59	0.00	0.60	0.48
d, Delay for Lane Group [s/veh]	0.00		10.77	5.18	5.18	0.00	8.95	8.77
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.91	0.91	0.91	0.00	1.18	0.85
50th-Percentile Queue Length [ft]	0.00		22.86	22.84	22.84	0.00	29.52	21.21
95th-Percentile Queue Length [veh]	0.00		1.65	1.64	1.64	0.00	2.13	1.53
95th-Percentile Queue Length [ft]	0.00		41.16	41.10	41.10	0.00	53.13	38.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	10.77	5.18	5.18	0.00	8.95	8.77
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.68			8.90		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.48											
Intersection LOS	A											
Intersection V/C	0.543											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.025	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	0	583	517
d_b, Bicycle Delay [s]	11.10	30.00	15.05	16.50
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.899	2.316
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.795

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	309	461	0	1323	670	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	309	461	0	1323	670	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	77	115	0	331	168	0
Total Analysis Volume [veh/h]	309	461	0	1323	670	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	48	48	48	48
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	22	22
g / C, Green / Cycle	0.35	0.35	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.17	0.29	0.37	0.13
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	625	558	1641	2348
d1, Uniform Delay [s]	12.20	14.20	11.08	8.01
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.61	3.18	0.97	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.83	0.81	0.29
d, Delay for Lane Group [s/veh]	12.81	17.38	12.05	8.08
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	2.25	4.21	4.72	1.11
50th-Percentile Queue Length [ft]	56.19	105.33	117.96	27.82
95th-Percentile Queue Length [veh]	4.05	7.58	8.28	2.00
95th-Percentile Queue Length [ft]	101.14	189.49	207.02	50.08

Movement, Approach, & Intersection Results

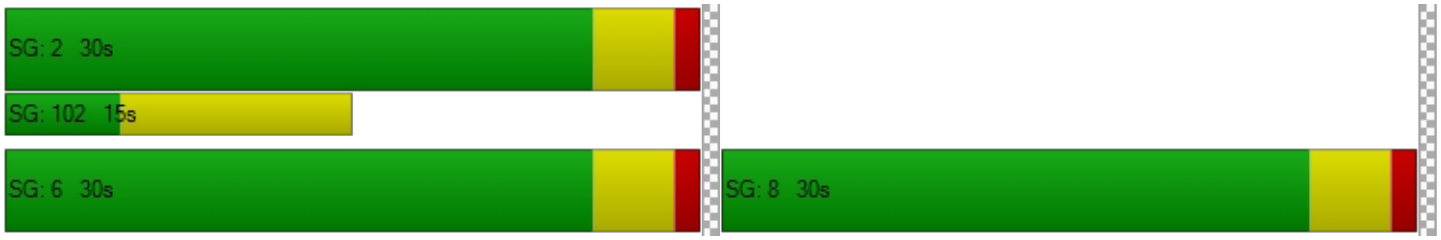
d_M, Delay for Movement [s/veh]	12.81	17.38	0.00	12.05	8.08	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	15.54		12.05		8.08	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.06					
Intersection LOS	B					
Intersection V/C	0.795					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.071	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.224	4.501
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	81.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.310

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	634	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	634	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	159	42	74	26
Total Analysis Volume [veh/h]	61	534	634	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	634	520	444	481
Degree of Utilization, x	0.12	0.94	1.31	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	27.42	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.73	685.57	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		141.73		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	81.78					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	499	420	888	147	357	138
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	499	420	888	147	357	138
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	105	222	37	89	35
Total Analysis Volume [veh/h]	499	420	888	147	357	138
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	17	43	26	0	17	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	10	31	16	16	10	10
g / C, Green / Cycle	0.20	0.62	0.32	0.32	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.14	0.12	0.25	0.09	0.14	0.14
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1665
c, Capacity [veh/h]	707	2204	1153	515	356	332
d1, Uniform Delay [s]	18.34	4.08	15.12	12.50	18.56	18.56
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.30	0.04	1.12	0.30	2.75	2.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.19	0.77	0.29	0.72	0.72
d, Delay for Lane Group [s/veh]	19.65	4.12	16.24	12.80	21.30	21.49
Lane Group LOS	B	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.48	0.57	3.98	1.08	2.70	2.54
50th-Percentile Queue Length [ft]	61.94	14.36	99.42	27.08	67.46	63.51
95th-Percentile Queue Length [veh]	4.46	1.03	7.16	1.95	4.86	4.57
95th-Percentile Queue Length [ft]	111.49	25.84	178.95	48.74	121.43	114.32

Movement, Approach, & Intersection Results

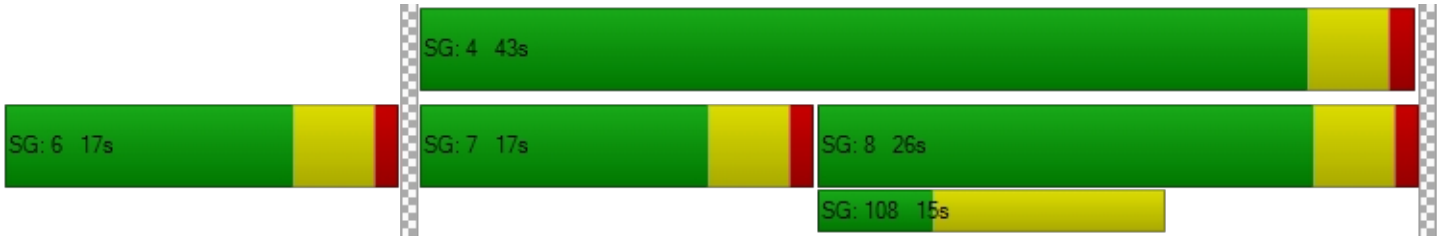
d_M, Delay for Movement [s/veh]	19.65	4.12	16.24	12.80	21.36	21.49
Movement LOS	B	A	B	B	C	C
d_A, Approach Delay [s/veh]	12.55		15.75		21.39	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	15.69					
Intersection LOS	B					
Intersection V/C	0.709					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.390
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.891	4.986	4.949
Bicycle LOS	E	E	E

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	11.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	426	304	214	815	352	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	304	214	815	352	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	76	54	204	88	16
Total Analysis Volume [veh/h]	426	304	214	815	352	62
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	4	16	7	7
g / C, Green / Cycle	0.32	0.32	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.19	0.06	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	577	515	422	1536	350	332
d1, Uniform Delay [s]	11.06	10.40	15.12	7.71	13.67	13.76
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.87	1.08	0.94	0.29	1.59	1.91
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.59	0.51	0.53	0.59	0.62
d, Delay for Lane Group [s/veh]	12.93	11.48	16.06	8.00	15.26	15.67
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.54	1.66	0.74	1.59	1.41	1.44
50th-Percentile Queue Length [ft]	63.54	41.48	18.62	39.84	35.24	35.98
95th-Percentile Queue Length [veh]	4.57	2.99	1.34	2.87	2.54	2.59
95th-Percentile Queue Length [ft]	114.36	74.67	33.52	71.70	63.44	64.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.93	11.48	16.06	8.00	15.43	15.67
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.33		9.67		15.47	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	11.67					
Intersection LOS	B					
Intersection V/C	0.696					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.357	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.981	4.474
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	679	0	0	747	70	0	0	0	87	324	239
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	679	0	0	747	70	0	0	0	87	324	239
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	170	0	0	187	18	0	0	0	22	81	60
Total Analysis Volume [veh/h]	28	679	0	0	747	70	0	0	0	87	324	239
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	9	35	0	0	26	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	36	36	36	36		36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	17	11	11		10	10
g / C, Green / Cycle	0.03	0.47	0.31	0.31		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.02	0.19	0.22	0.23		0.19	0.20
s, saturation flow rate [veh/h]	1781	3560	1870	1815		1848	1487
c, Capacity [veh/h]	62	1680	585	568		516	415
d1, Uniform Delay [s]	17.12	6.23	10.93	11.02		11.66	11.69
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.06	0.16	1.52	1.73		1.69	2.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.40	0.70	0.72		0.69	0.70
d, Delay for Lane Group [s/veh]	22.18	6.39	12.45	12.76		13.35	13.87
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.28	1.04	2.34	2.38		2.17	1.83
50th-Percentile Queue Length [ft]	7.00	26.11	58.43	59.53		54.17	45.63
95th-Percentile Queue Length [veh]	0.50	1.88	4.21	4.29		3.90	3.29
95th-Percentile Queue Length [ft]	12.59	47.01	105.17	107.15		97.51	82.13

Movement, Approach, & Intersection Results

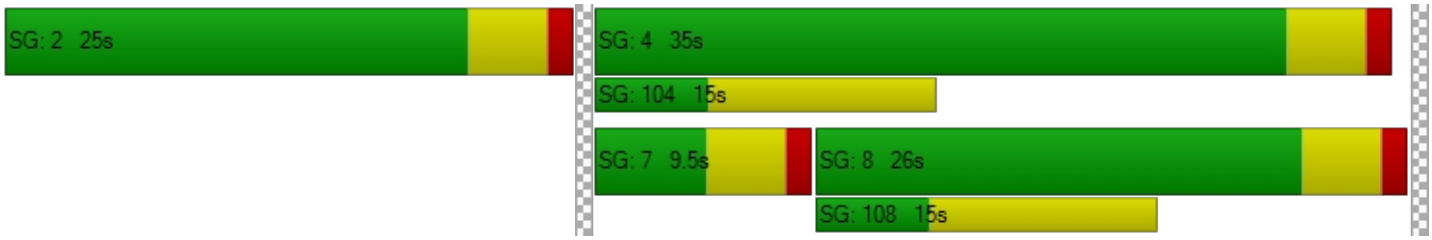
d_M, Delay for Movement [s/veh]	22.18	6.39	0.00	0.00	12.59	12.76	0.00	0.00	0.00	13.35	13.43	13.87
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	7.01			12.61			0.00			13.58		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.08											
Intersection LOS	B											
Intersection V/C	0.656											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.901	2.012
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	717	0	683
d_b, Bicycle Delay [s]	7.25	12.35	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.143	2.234	4.132	2.096
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	621	52	152	740	0	29	71	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	621	52	152	740	0	29	71	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	155	13	38	185	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	621	52	152	740	0	29	71	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	19	0	22	41	0	0	19	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	28	28	28	28	28	28	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	8	8	4	16	3	3	
g / C, Green / Cycle	0.29	0.29	0.12	0.57	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.18	0.18	0.09	0.21	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1820	1781	3560	1781	1798	
c, Capacity [veh/h]	540	526	222	2038	196	198	
d1, Uniform Delay [s]	8.74	8.79	11.86	3.27	11.41	11.83	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.18	1.31	3.68	0.11	0.34	1.70	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.62	0.64	0.68	0.36	0.15	0.47	
d, Delay for Lane Group [s/veh]	9.92	10.10	15.54	3.38	11.75	13.53	
Lane Group LOS	A	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.29	1.31	0.89	0.25	0.14	0.49	
50th-Percentile Queue Length [ft]	32.15	32.65	22.24	6.32	3.49	12.28	
95th-Percentile Queue Length [veh]	2.31	2.35	1.60	0.46	0.25	0.88	
95th-Percentile Queue Length [ft]	57.87	58.77	40.04	11.38	6.29	22.10	

Movement, Approach, & Intersection Results

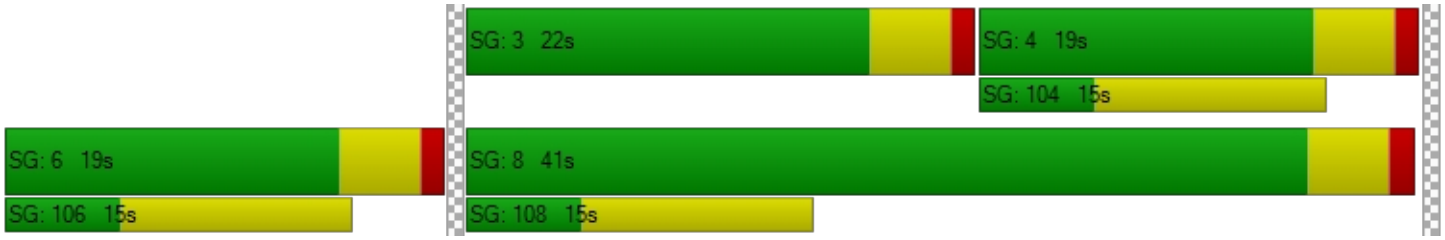
d_M, Delay for Movement [s/veh]	0.00	10.01	10.10	15.54	3.38	0.00	11.75	13.53	13.53	0.00	0.00	0.00
Movement LOS		B	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]		10.01			5.45			13.10			0.00	
Approach LOS		B			A			B			A	
d_I, Intersection Delay [s/veh]	7.82											
Intersection LOS	A											
Intersection V/C	0.559											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.461	0.000	1.755	1.672
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	483	1217	483	0
d_b, Bicycle Delay [s]	17.25	4.60	17.25	30.00
l_b,int, Bicycle LOS Score for Intersection	2.115	2.296	1.759	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.522

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	915	165	177	1092	337	600
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	915	165	177	1092	337	600
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	229	41	44	273	84	150
Total Analysis Volume [veh/h]	915	165	177	1092	337	600
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	37	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	17	17	11	11	11
g / C, Green / Cycle	0.46	0.46	0.46	0.46	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.18	0.10	0.15	0.21	0.18	0.19	0.20
s, saturation flow rate [veh/h]	5094	1589	1185	5094	1781	1601	1589
c, Capacity [veh/h]	2347	732	541	2347	531	477	474
d1, Uniform Delay [s]	6.61	6.05	10.93	6.90	11.17	11.40	11.42
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.15	0.35	0.14	1.07	1.51	1.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.23	0.33	0.47	0.60	0.65	0.66
d, Delay for Lane Group [s/veh]	6.72	6.21	11.28	7.05	12.24	12.91	12.96
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.02	0.52	0.48	1.27	1.85	1.90	1.90
50th-Percentile Queue Length [ft]	25.45	13.10	12.11	31.78	46.17	47.39	47.48
95th-Percentile Queue Length [veh]	1.83	0.94	0.87	2.29	3.32	3.41	3.42
95th-Percentile Queue Length [ft]	45.81	23.58	21.81	57.21	83.11	85.29	85.47

Movement, Approach, & Intersection Results

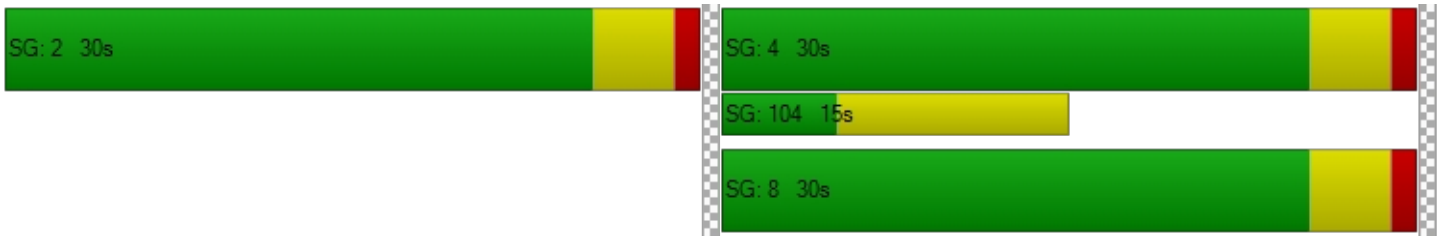
d_M, Delay for Movement [s/veh]	6.72	6.21	11.28	7.05	12.29	12.94
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.64		7.64		12.70	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.75					
Intersection LOS	A					
Intersection V/C	0.522					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.782
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.726	4.830	5.678
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	414	1119	0	0	772	259	0	0	0	66	0	423
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	414	1119	0	0	772	259	0	0	0	66	0	423
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	280	0	0	193	65	0	0	0	17	0	106
Total Analysis Volume [veh/h]	414	1119	0	0	772	259	0	0	0	66	0	423
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	33	0	0	19	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	30	30	30		30	30
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	19	8		2	2
g / C, Green / Cycle	0.21	0.63	0.27		0.07	0.07
(v / s)_i Volume / Saturation Flow Rate	0.12	0.31	0.15		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	722	2250	1400		128	128
d1, Uniform Delay [s]	10.79	3.00	9.41		13.33	13.33
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.72	0.17	0.34		1.06	1.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.57	0.50	0.55		0.26	0.26
d, Delay for Lane Group [s/veh]	11.51	3.17	9.75		14.39	14.39
Lane Group LOS	B	A	A		B	B
Critical Lane Group	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.96	0.23	1.02		0.20	0.20
50th-Percentile Queue Length [ft]	23.97	5.70	25.48		5.08	5.08
95th-Percentile Queue Length [veh]	1.73	0.41	1.83		0.37	0.37
95th-Percentile Queue Length [ft]	43.14	10.26	45.86		9.14	9.14

Movement, Approach, & Intersection Results

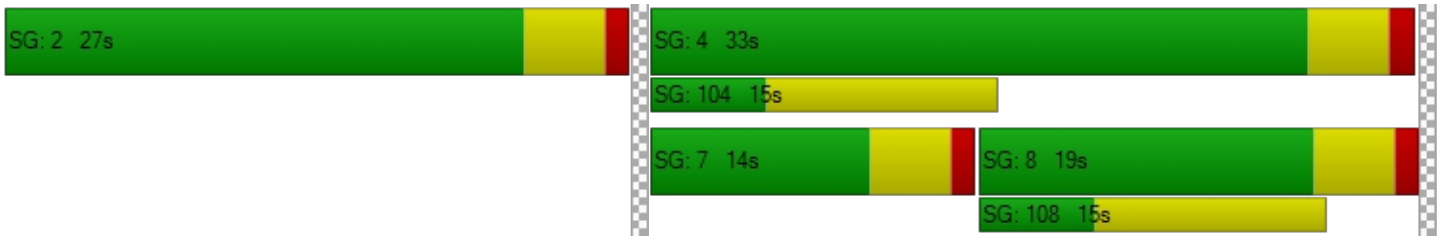
d_M, Delay for Movement [s/veh]	11.51	3.17	0.00	0.00	9.75	0.00	0.00	0.00	0.00	14.39	14.39	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.42			9.75			0.00			14.39		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.08											
Intersection LOS	A											
Intersection V/C	0.552											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.897	1.942
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	950	483	0	750
d_b, Bicycle Delay [s]	8.27	17.25	30.00	11.72
l_b,int, Bicycle LOS Score for Intersection	2.824	1.984	4.132	1.669
Bicycle LOS	C	A	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1015	100	0	570	271	444	13	554	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1015	100	0	570	271	444	13	554	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	254	25	0	143	68	111	3	139	0	0	0
Total Analysis Volume [veh/h]	0	1015	100	0	570	271	444	13	554	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	9	28	0	0	19	0	0	32	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	27	27	27	27	27	27	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	12	12	7	6	6	
g / C, Green / Cycle	0.00	0.43	0.43	0.27	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.30	0.30	0.16	0.13	0.00	
s, saturation flow rate [veh/h]	1781	1870	1812	3560	3459	3560	
c, Capacity [veh/h]	1	812	787	952	805	829	
d1, Uniform Delay [s]	0.00	6.20	6.21	8.64	9.13	7.99	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	1.09	1.13	0.61	0.59	0.01	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.70	0.70	0.60	0.55	0.02	
d, Delay for Lane Group [s/veh]	0.00	7.30	7.34	9.25	9.72	7.99	
Lane Group LOS	A	A	A	A	A	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.34	1.31	0.96	0.79	0.02	
50th-Percentile Queue Length [ft]	0.00	33.51	32.70	24.06	19.81	0.49	
95th-Percentile Queue Length [veh]	0.00	2.41	2.35	1.73	1.43	0.04	
95th-Percentile Queue Length [ft]	0.00	60.32	58.85	43.30	35.66	0.88	

Movement, Approach, & Intersection Results

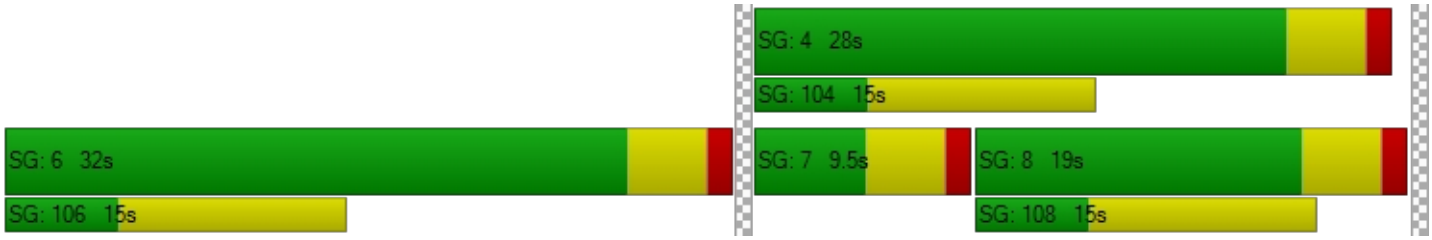
d_M, Delay for Movement [s/veh]	0.00	7.31	7.34	0.00	9.25	0.00	9.72	7.99	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		A	A				
d_A, Approach Delay [s/veh]	7.32			9.25			9.67			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	8.33											
Intersection LOS	A											
Intersection V/C	0.779											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.609	0.000	2.508	1.751
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	483	917	0
d_b, Bicycle Delay [s]	11.10	17.25	8.80	30.00
l_b,int, Bicycle LOS Score for Intersection	2.479	2.030	1.937	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	540	104	65	494	0	0	0	0	464	0	405
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	540	104	65	494	0	0	0	0	464	0	405
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	135	26	16	124	0	0	0	0	116	0	101
Total Analysis Volume [veh/h]	0	540	104	65	494	0	0	0	0	464	0	405
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	9	22	0	9	22	0	0	0	0	29	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	13		14	14
g / C, Green / Cycle	0.00	0.25	0.25	0.07	0.32		0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00	0.18	0.18	0.04	0.14		0.26	0.25
s, saturation flow rate [veh/h]	1781	1870	1767	1781	3560		1781	1589
c, Capacity [veh/h]	0	472	446	117	1131		613	547
d1, Uniform Delay [s]	0.00	13.56	13.58	18.11	10.80		11.62	11.53
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	1.89	2.04	4.11	0.27		1.94	1.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.70	0.70	0.56	0.44		0.76	0.74
d, Delay for Lane Group [s/veh]	0.00	15.45	15.62	22.22	11.07		13.56	13.52
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.41	2.31	0.64	1.38		3.07	2.68
50th-Percentile Queue Length [ft]	0.00	60.14	57.68	15.89	34.48		76.78	66.91
95th-Percentile Queue Length [veh]	0.00	4.33	4.15	1.14	2.48		5.53	4.82
95th-Percentile Queue Length [ft]	0.00	108.26	103.83	28.59	62.06		138.20	120.44

Movement, Approach, & Intersection Results

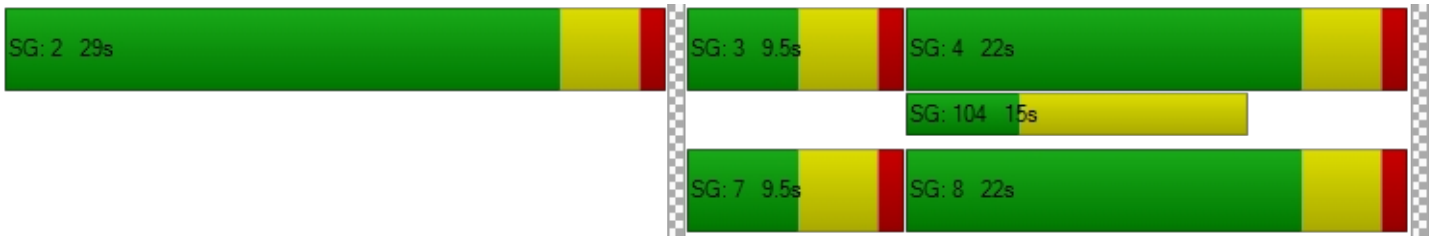
d_M, Delay for Movement [s/veh]	0.00	15.52	15.62	22.22	11.07	0.00	0.00	0.00	0.00	13.56	0.00	13.52
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	15.54			12.36			0.00			13.54		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.84											
Intersection LOS	B											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.258
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.091	2.021	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.445

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	158	826	0	0	563	202
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	158	826	0	0	563	202
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	40	207	0	0	141	51
Total Analysis Volume [veh/h]	0	0	0	0	0	0	158	826	0	0	563	202
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	11	0	0	0	0	19	40	0	9	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	10	10	0	7	7
g / C, Green / Cycle	0.00		0.14	0.43	0.43	0.00	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.22	0.22	0.00	0.16	0.13
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		479	812	812	1	1055	471
d1, Uniform Delay [s]	0.00		9.30	4.91	4.91	0.00	7.03	6.78
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.40	0.49	0.49	0.00	0.42	0.62
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.33	0.51	0.51	0.00	0.53	0.43
d, Delay for Lane Group [s/veh]	0.00		9.70	5.41	5.41	0.00	7.45	7.40
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.26	0.57	0.57	0.00	0.66	0.49
50th-Percentile Queue Length [ft]	0.00		6.51	14.32	14.32	0.00	16.42	12.32
95th-Percentile Queue Length [veh]	0.00		0.47	1.03	1.03	0.00	1.18	0.89
95th-Percentile Queue Length [ft]	0.00		11.71	25.77	25.77	0.00	29.55	22.17

Movement, Approach, & Intersection Results

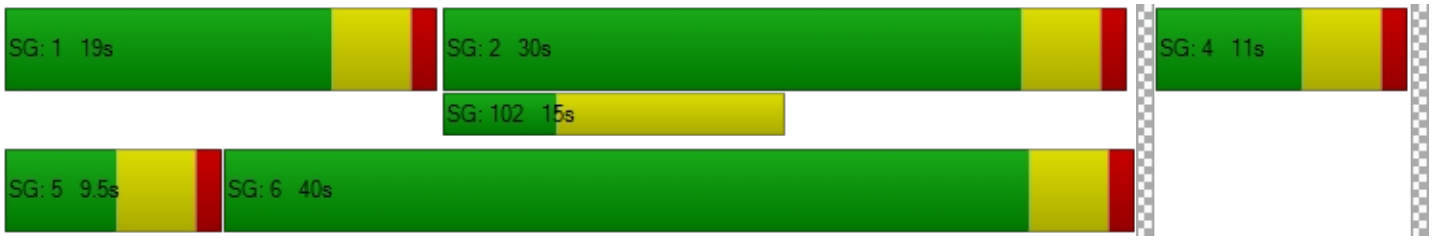
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.70	5.41	5.41	0.00	7.45	7.40
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.10			7.44		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.68											
Intersection LOS	A											
Intersection V/C	0.445											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.871	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	217	0	1183	850
d_b, Bicycle Delay [s]	23.85	30.00	5.00	9.92
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.371	2.191
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.806

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	233	718	0	715	588	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	233	718	0	715	588	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	180	0	179	147	0
Total Analysis Volume [veh/h]	233	718	0	715	588	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	40	0	0	20	20	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	22	22	12	12
g / C, Green / Cycle	0.51	0.51	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.13	0.45	0.20	0.12
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	913	814	976	1396
d1, Uniform Delay [s]	5.76	9.14	13.90	12.56
k, delay calibration	0.11	0.18	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	5.25	1.08	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.88	0.73	0.42
d, Delay for Lane Group [s/veh]	5.91	14.39	14.98	12.76
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	0.79	4.87	2.65	1.27
50th-Percentile Queue Length [ft]	19.76	121.70	66.20	31.63
95th-Percentile Queue Length [veh]	1.42	8.49	4.77	2.28
95th-Percentile Queue Length [ft]	35.57	212.16	119.15	56.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	5.91	14.39	0.00	14.98	12.76	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	12.31		14.98		12.76	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	13.27					
Intersection LOS	B					
Intersection V/C	0.806					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.159	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.722	4.456
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	40.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.979

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	79	110	337	95	764	234
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	110	337	95	764	234
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	84	24	191	59
Total Analysis Volume [veh/h]	79	110	337	95	764	234
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	454	500	451	482	509	554
Degree of Utilization, x	0.17	0.22	0.75	0.20	0.98	0.90

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.83	6.19	0.73	13.03	10.68
95th-Percentile Queue Length [ft]	15.58	20.80	154.66	18.15	325.81	267.03
Approach Delay [s/veh]	12.07		26.63		52.00	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	40.57					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	657	599	411	126	556	223
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	657	599	411	126	556	223
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	164	150	103	32	139	56
Total Analysis Volume [veh/h]	657	599	411	126	556	223
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	19	38	19	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	49	49	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	13	26	9	9	14	14
g / C, Green / Cycle	0.26	0.52	0.17	0.17	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.19	0.17	0.12	0.08	0.22	0.23
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1664
c, Capacity [veh/h]	889	1863	621	277	522	488
d1, Uniform Delay [s]	16.71	6.70	18.89	18.15	15.77	15.88
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.23	0.10	1.22	1.16	2.34	2.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.32	0.66	0.45	0.76	0.78
d, Delay for Lane Group [s/veh]	17.93	6.80	20.11	19.31	18.11	18.64
Lane Group LOS	B	A	C	B	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	3.07	1.32	2.04	1.23	3.78	3.69
50th-Percentile Queue Length [ft]	76.87	32.99	51.00	30.73	94.61	92.26
95th-Percentile Queue Length [veh]	5.53	2.37	3.67	2.21	6.81	6.64
95th-Percentile Queue Length [ft]	138.37	59.37	91.79	55.32	170.30	166.07

Movement, Approach, & Intersection Results

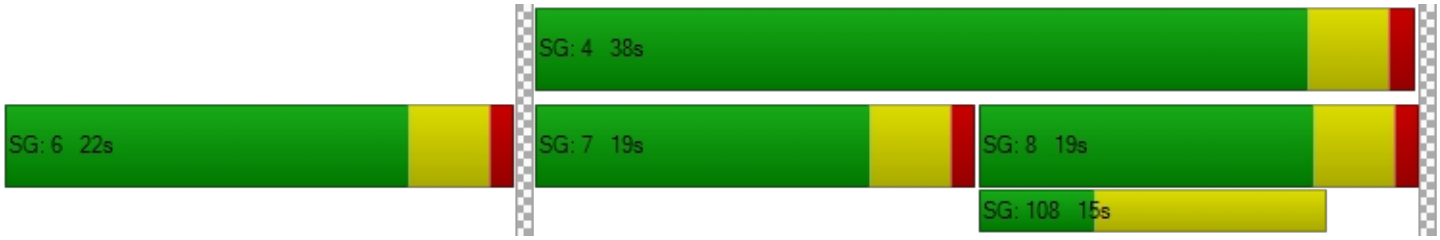
d_M, Delay for Movement [s/veh]	17.93	6.80	20.11	19.31	18.26	18.64
Movement LOS	B	A	C	B	B	B
d_A, Approach Delay [s/veh]	12.62		19.92		18.37	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	15.89					
Intersection LOS	B					
Intersection V/C	0.708					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.492
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.169	4.575	5.418
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.603

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	278	240	277	328	495	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	240	277	328	495	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	60	69	82	124	22
Total Analysis Volume [veh/h]	278	240	277	328	495	88
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	8	8	5	18	9	9
g / C, Green / Cycle	0.23	0.23	0.14	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.15	0.08	0.09	0.16	0.16
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	419	374	498	1829	456	433
d1, Uniform Delay [s]	12.42	12.35	14.27	4.67	12.14	12.26
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.81	1.84	0.97	0.05	1.49	1.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.64	0.56	0.18	0.64	0.67
d, Delay for Lane Group [s/veh]	14.23	14.19	15.24	4.72	13.63	14.08
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.76	1.52	0.91	0.36	1.78	1.83
50th-Percentile Queue Length [ft]	44.01	38.04	22.80	9.08	44.62	45.77
95th-Percentile Queue Length [veh]	3.17	2.74	1.64	0.65	3.21	3.30
95th-Percentile Queue Length [ft]	79.22	68.47	41.03	16.34	80.31	82.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.23	14.19	15.24	4.72	13.82	14.08
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.21		9.54		13.86	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.43					
Intersection LOS	B					
Intersection V/C	0.603					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.327	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.632	4.613
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.756

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	703	0	0	1276	92	0	0	0	61	121	246
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	703	0	0	1276	92	0	0	0	61	121	246
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	176	0	0	319	23	0	0	0	15	30	62
Total Analysis Volume [veh/h]	21	703	0	0	1276	92	0	0	0	61	121	246
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	43	0	0	33	0	0	0	0	0	17	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	45	45	45	45		45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	26	20	20		10	10
g / C, Green / Cycle	0.03	0.58	0.45	0.45		0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.37	0.37		0.10	0.17
s, saturation flow rate [veh/h]	1781	3560	1870	1827		1839	1446
c, Capacity [veh/h]	46	2050	844	824		417	328
d1, Uniform Delay [s]	21.87	5.11	10.82	10.98		15.12	16.42
k, delay calibration	0.11	0.11	0.12	0.13		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.75	0.10	2.11	2.64		0.72	3.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.34	0.81	0.83		0.44	0.75
d, Delay for Lane Group [s/veh]	28.62	5.21	12.93	13.61		15.85	19.88
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.29	1.11	4.86	5.03		1.47	2.35
50th-Percentile Queue Length [ft]	7.17	27.75	121.46	125.70		36.82	58.85
95th-Percentile Queue Length [veh]	0.52	2.00	8.47	8.71		2.65	4.24
95th-Percentile Queue Length [ft]	12.91	49.94	211.83	217.63		66.28	105.93

Movement, Approach, & Intersection Results

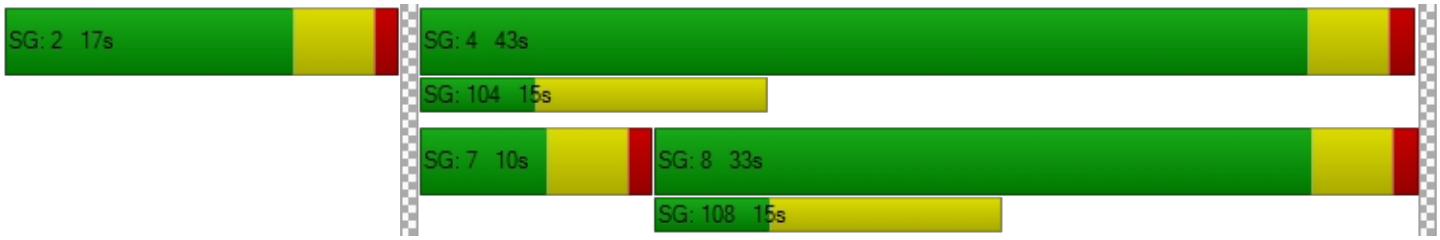
d_M, Delay for Movement [s/veh]	28.62	5.21	0.00	0.00	13.25	13.61	0.00	0.00	0.00	15.85	15.85	19.88
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	5.88			13.27			0.00			18.17		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.98											
Intersection LOS	B											
Intersection V/C	0.756											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.810	1.904
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1283	950	0	417
d_b, Bicycle Delay [s]	3.85	8.27	30.00	18.80
l_b,int, Bicycle LOS Score for Intersection	2.157	2.688	4.132	1.913
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.741

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	668	109	282	1055	0	61	276	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	668	109	282	1055	0	61	276	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	167	27	71	264	0	15	69	11	0	0	0
Total Analysis Volume [veh/h]	0	668	109	282	1055	0	61	276	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	47	47	47	47	47	47	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	13	13	9	27	10	10	
g / C, Green / Cycle	0.28	0.28	0.20	0.58	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.21	0.22	0.16	0.30	0.03	0.17	
s, saturation flow rate [veh/h]	1870	1782	1781	3560	1781	1827	
c, Capacity [veh/h]	531	506	361	2076	400	410	
d1, Uniform Delay [s]	15.13	15.32	17.65	5.77	14.56	17.02	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.97	2.49	3.69	0.19	0.18	3.17	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.73	0.77	0.78	0.51	0.15	0.78	
d, Delay for Lane Group [s/veh]	17.09	17.81	21.34	5.97	14.73	20.19	
Lane Group LOS	B	B	C	A	B	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	3.42	3.52	2.86	1.94	0.47	3.12	
50th-Percentile Queue Length [ft]	85.55	88.07	71.57	48.56	11.79	77.93	
95th-Percentile Queue Length [veh]	6.16	6.34	5.15	3.50	0.85	5.61	
95th-Percentile Queue Length [ft]	154.00	158.52	128.83	87.40	21.22	140.28	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	17.39	17.81	21.34	5.97	0.00	14.73	20.19	20.19	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	C	C			
d_A, Approach Delay [s/veh]	17.45			9.21			19.31			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	13.31											
Intersection LOS	B											
Intersection V/C	0.741											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.569	0.000	1.880	2.054
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.201	2.663	2.185	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.502

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1190	232	163	1072	358	449
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1190	232	163	1072	358	449
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	298	58	41	268	90	112
Total Analysis Volume [veh/h]	1190	232	163	1072	358	449
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	34	0	0	34	26	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	39	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	20	20	20	20	10	10	10
g / C, Green / Cycle	0.51	0.51	0.51	0.51	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.23	0.15	0.18	0.21	0.16	0.16	0.16
s, saturation flow rate [veh/h]	5094	1589	914	5094	1781	1642	1589
c, Capacity [veh/h]	2595	810	473	2595	459	423	410
d1, Uniform Delay [s]	6.07	5.45	11.07	5.90	12.64	12.72	12.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.19	0.43	0.11	1.31	1.54	1.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.29	0.34	0.41	0.61	0.63	0.64
d, Delay for Lane Group [s/veh]	6.20	5.64	11.50	6.00	13.94	14.26	14.40
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.25	0.68	0.47	1.09	1.85	1.79	1.77
50th-Percentile Queue Length [ft]	31.30	17.11	11.76	27.34	46.19	44.85	44.33
95th-Percentile Queue Length [veh]	2.25	1.23	0.85	1.97	3.33	3.23	3.19
95th-Percentile Queue Length [ft]	56.34	30.80	21.17	49.21	83.13	80.73	79.80

Movement, Approach, & Intersection Results

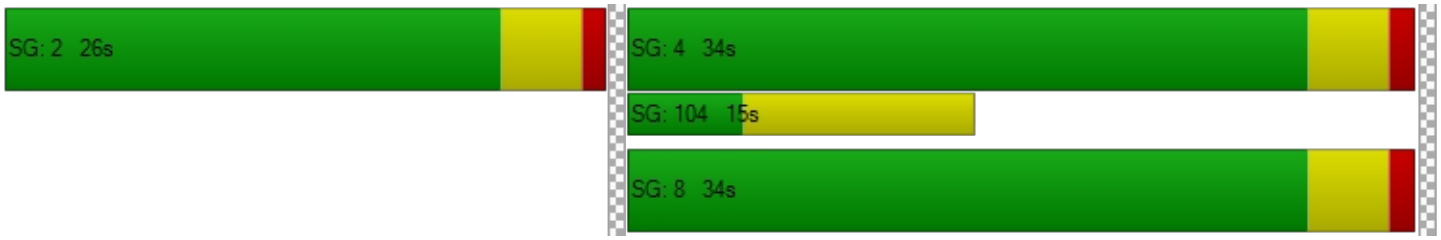
d_M, Delay for Movement [s/veh]	6.20	5.64	11.50	6.00	14.02	14.34
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.11		6.73		14.20	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.21					
Intersection LOS	A					
Intersection V/C	0.502					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.747
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.915	4.812	5.464
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	301	1093	0	0	1346	485	0	0	0	82	2	401
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	301	1093	0	0	1346	485	0	0	0	82	2	401
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	75	273	0	0	337	121	0	0	0	21	1	100
Total Analysis Volume [veh/h]	301	1093	0	0	1346	485	0	0	0	82	2	401
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	6	26	16		3	3
g / C, Green / Cycle	0.15	0.68	0.42		0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.09	0.31	0.26		0.02	0.02
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1785
c, Capacity [veh/h]	521	2439	2119		139	140
d1, Uniform Delay [s]	15.03	2.72	8.82		16.55	16.55
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.01	0.13	0.32		1.20	1.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.45	0.64		0.30	0.30
d, Delay for Lane Group [s/veh]	16.04	2.85	9.13		17.74	17.74
Lane Group LOS	B	A	A		B	B
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.07	0.39	2.06		0.34	0.34
50th-Percentile Queue Length [ft]	26.84	9.74	51.46		8.50	8.50
95th-Percentile Queue Length [veh]	1.93	0.70	3.70		0.61	0.61
95th-Percentile Queue Length [ft]	48.32	17.52	92.62		15.30	15.31

Movement, Approach, & Intersection Results

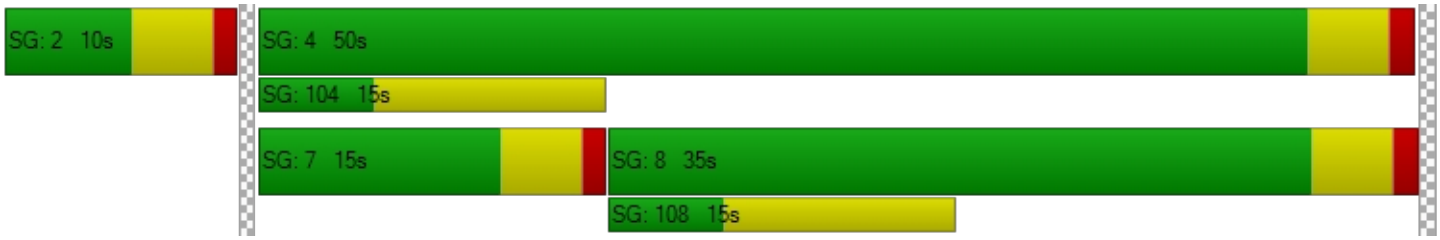
d_M, Delay for Movement [s/veh]	16.04	2.85	0.00	0.00	9.13	0.00	0.00	0.00	0.00	17.74	17.74	0.00
Movement LOS	B	A			A					B	B	
d_A, Approach Delay [s/veh]	5.70			9.13			0.00			17.74		
Approach LOS	A			A			A			B		
d_I, Intersection Delay [s/veh]	7.69											
Intersection LOS	A											
Intersection V/C	0.548											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.843	1.948
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.710	2.300	4.132	1.698
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	0	1109	181	0	1059	373	250	169	345	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1109	181	0	1059	373	250	169	345	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	277	45	0	265	93	63	42	86	0	0	0
Total Analysis Volume [veh/h]	0	1109	181	0	1059	373	250	169	345	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	32	32	32	32	32	32	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	0	18	18	13	5	5	
g / C, Green / Cycle	0.00	0.56	0.56	0.42	0.16	0.16	
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.30	0.07	0.05	
s, saturation flow rate [veh/h]	1781	1870	1780	3560	3459	3560	
c, Capacity [veh/h]	1	1048	998	1495	549	565	
d1, Uniform Delay [s]	0.00	4.78	4.79	7.68	12.23	11.91	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.00	0.63	0.67	0.63	0.59	0.29	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.00	0.63	0.63	0.71	0.46	0.30	
d, Delay for Lane Group [s/veh]	0.00	5.41	5.46	8.31	12.82	12.21	
Lane Group LOS	A	A	A	A	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.00	1.22	1.18	1.84	0.66	0.43	
50th-Percentile Queue Length [ft]	0.00	30.47	29.48	46.04	16.56	10.74	
95th-Percentile Queue Length [veh]	0.00	2.19	2.12	3.31	1.19	0.77	
95th-Percentile Queue Length [ft]	0.00	54.85	53.07	82.87	29.81	19.33	

Movement, Approach, & Intersection Results

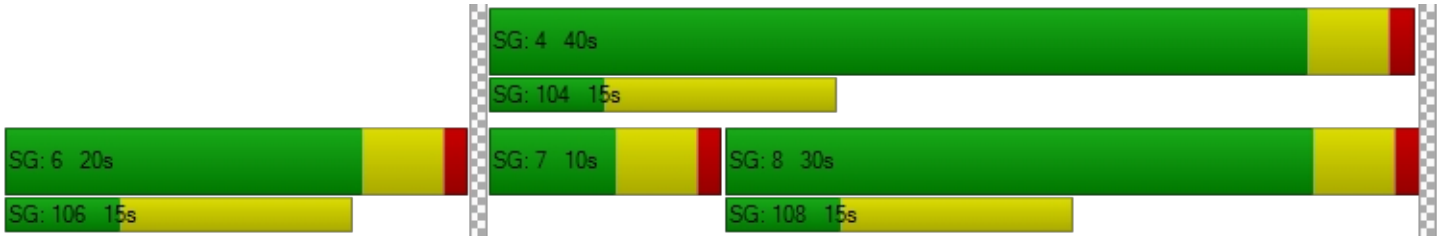
d_M, Delay for Movement [s/veh]	0.00	5.43	5.46	0.00	8.31	0.00	12.82	12.21	0.00	0.00	0.00	0.00
Movement LOS	A	A	A		A		B	B				
d_A, Approach Delay [s/veh]	5.43			8.31			12.57			0.00		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	7.61											
Intersection LOS	A											
Intersection V/C	0.684											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.739	0.000	2.502	1.866
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.624	2.433	1.905	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	588	119	108	741	0	0	0	0	244	0	326
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	588	119	108	741	0	0	0	0	244	0	326
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	147	30	27	185	0	0	0	0	61	0	82
Total Analysis Volume [veh/h]	1	588	119	108	741	0	0	0	0	244	0	326
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	24	0	11	25	0	0	0	0	25	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	38	38	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	10	10	3	14		11	11
g / C, Green / Cycle	0.00	0.27	0.27	0.09	0.36		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.20	0.06	0.21		0.14	0.21
s, saturation flow rate [veh/h]	1781	1870	1762	1781	3560		1781	1589
c, Capacity [veh/h]	3	515	485	161	1297		499	445
d1, Uniform Delay [s]	19.01	12.42	12.44	16.78	9.73		11.45	12.44
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	60.59	1.78	1.92	4.72	0.40		0.75	2.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.71	0.71	0.67	0.57		0.49	0.73
d, Delay for Lane Group [s/veh]	79.60	14.21	14.35	21.51	10.12		12.20	14.78
Lane Group LOS	E	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.40	2.29	0.98	1.86		1.44	2.22
50th-Percentile Queue Length [ft]	1.39	60.07	57.34	24.58	46.56		35.92	55.62
95th-Percentile Queue Length [veh]	0.10	4.33	4.13	1.77	3.35		2.59	4.00
95th-Percentile Queue Length [ft]	2.51	108.13	103.21	44.24	83.81		64.66	100.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	79.60	14.26	14.35	21.51	10.12	0.00	0.00	0.00	0.00	12.20	0.00	14.78
Movement LOS	E	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.37			11.57			0.00			13.68		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.07											
Intersection LOS	B											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.180
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	650	683	0	0
d_b, Bicycle Delay [s]	13.67	13.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.144	2.260	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.555

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	435	1225	0	0	695	251
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	435	1225	0	0	695	251
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	109	306	0	0	174	63
Total Analysis Volume [veh/h]	0	0	0	0	0	0	435	1225	0	0	695	251
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	28	0	0	0	0	12	22	0	10	20	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	29		29	29	29	29	29	29
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		6	16	16	0	9	9
g / C, Green / Cycle	0.00		0.22	0.54	0.54	0.00	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.33	0.33	0.00	0.20	0.16
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		759	1009	1009	0	1140	509
d1, Uniform Delay [s]	0.00		10.23	4.63	4.63	0.00	8.42	8.05
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.69	0.59	0.59	0.00	0.53	0.74
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.57	0.61	0.61	0.00	0.61	0.49
d, Delay for Lane Group [s/veh]	0.00		10.91	5.22	5.22	0.00	8.95	8.79
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.93	0.96	0.96	0.00	1.23	0.89
50th-Percentile Queue Length [ft]	0.00		23.36	23.92	23.92	0.00	30.66	22.34
95th-Percentile Queue Length [veh]	0.00		1.68	1.72	1.72	0.00	2.21	1.61
95th-Percentile Queue Length [ft]	0.00		42.06	43.06	43.06	0.00	55.19	40.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	10.91	5.22	5.22	0.00	8.95	8.79
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.71			8.91		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.51											
Intersection LOS	A											
Intersection V/C	0.555											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.030	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	0	583	517
d_b, Bicycle Delay [s]	11.10	30.00	15.05	16.50
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.929	2.340
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	321	461	0	1347	689	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	321	461	0	1347	689	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	80	115	0	337	172	0
Total Analysis Volume [veh/h]	321	461	0	1347	689	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	30	0	0	30	30	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	49	49	49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	17	17	23	23
g / C, Green / Cycle	0.35	0.35	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.18	0.29	0.38	0.14
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	624	557	1659	2373
d1, Uniform Delay [s]	12.62	14.57	11.26	8.09
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.66	3.21	1.00	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.83	0.81	0.29
d, Delay for Lane Group [s/veh]	13.28	17.78	12.26	8.16
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	2.44	4.35	4.97	1.18
50th-Percentile Queue Length [ft]	61.00	108.83	124.16	29.39
95th-Percentile Queue Length [veh]	4.39	7.78	8.62	2.12
95th-Percentile Queue Length [ft]	109.80	194.38	215.53	52.91

Movement, Approach, & Intersection Results

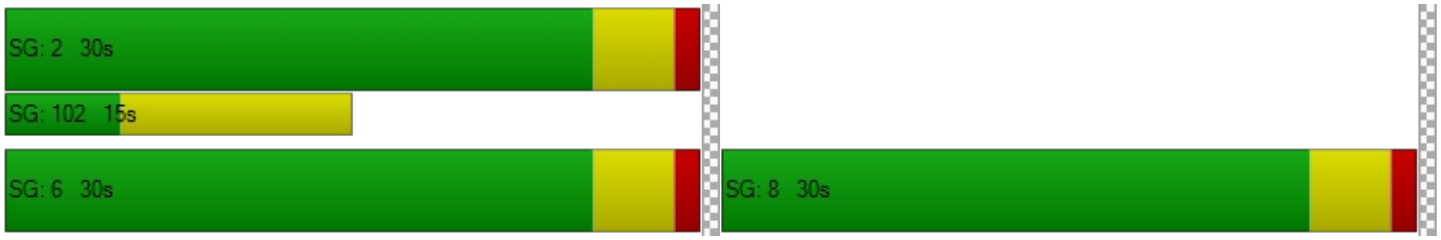
d_M, Delay for Movement [s/veh]	13.28	17.78	0.00	12.26	8.16	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	15.93		12.26		8.16	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	12.27					
Intersection LOS	B					
Intersection V/C	0.799					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.077	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.244	4.511
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	86.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.339

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	61	534	648	169	296	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	534	648	169	296	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	134	162	42	74	26
Total Analysis Volume [veh/h]	61	534	648	169	296	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	513	569	648	520	444	481
Degree of Utilization, x	0.12	0.94	1.34	0.33	0.45	0.41

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.40	12.11	28.91	1.40	2.27	2.01
95th-Percentile Queue Length [ft]	10.06	302.74	722.74	35.02	56.71	50.23
Approach Delay [s/veh]	44.66		151.69		16.32	
Approach LOS	E		F		C	
Intersection Delay [s/veh]	86.74					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	499	420	888	147	374	138
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	499	420	888	147	374	138
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	105	222	37	94	35
Total Analysis Volume [veh/h]	499	420	888	147	374	138
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	17	43	26	0	17	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	50	50	50	50	50	50
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	10	31	16	16	10	10
g / C, Green / Cycle	0.20	0.62	0.32	0.32	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.14	0.12	0.25	0.09	0.15	0.15
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1669
c, Capacity [veh/h]	705	2195	1149	513	364	341
d1, Uniform Delay [s]	18.58	4.19	15.33	12.68	18.65	18.66
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.32	0.04	1.14	0.30	2.78	2.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.19	0.77	0.29	0.73	0.73
d, Delay for Lane Group [s/veh]	19.91	4.23	16.47	12.98	21.43	21.62
Lane Group LOS	B	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.52	0.60	4.05	1.10	2.82	2.66
50th-Percentile Queue Length [ft]	62.95	14.93	101.23	27.56	70.53	66.54
95th-Percentile Queue Length [veh]	4.53	1.07	7.29	1.98	5.08	4.79
95th-Percentile Queue Length [ft]	113.31	26.87	182.21	49.61	126.95	119.77

Movement, Approach, & Intersection Results

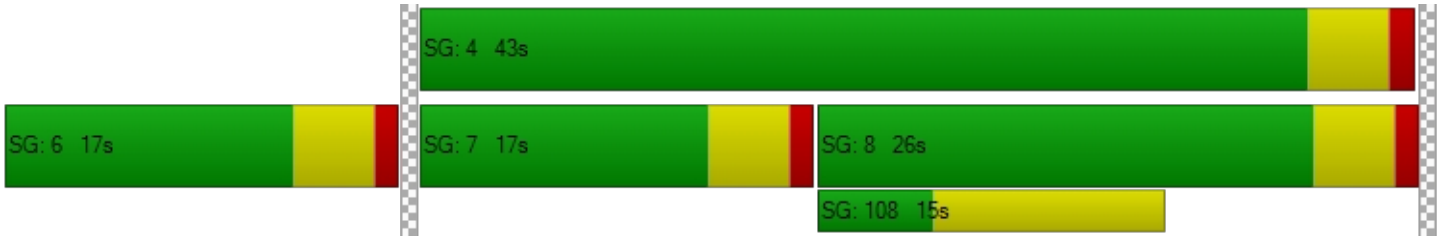
d_M, Delay for Movement [s/veh]	19.91	4.23	16.47	12.98	21.49	21.62
Movement LOS	B	A	B	B	C	C
d_A, Approach Delay [s/veh]	12.74		15.97		21.52	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	15.92					
Intersection LOS	B					
Intersection V/C	0.713					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.394
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.891	4.986	4.977
Bicycle LOS	E	E	E

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	426	327	218	815	352	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	327	218	815	352	62
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	82	55	204	88	16
Total Analysis Volume [veh/h]	426	327	218	815	352	62
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	4	16	7	7
g / C, Green / Cycle	0.32	0.32	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.21	0.06	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	579	517	423	1535	350	332
d1, Uniform Delay [s]	11.05	10.59	15.18	7.75	13.73	13.82
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.84	1.29	0.97	0.29	1.60	1.92
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.63	0.52	0.53	0.59	0.62
d, Delay for Lane Group [s/veh]	12.89	11.87	16.16	8.04	15.33	15.74
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.54	1.84	0.76	1.61	1.42	1.45
50th-Percentile Queue Length [ft]	63.60	45.94	19.10	40.18	35.45	36.19
95th-Percentile Queue Length [veh]	4.58	3.31	1.38	2.89	2.55	2.61
95th-Percentile Queue Length [ft]	114.49	82.69	34.38	72.33	63.81	65.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.89	11.87	16.16	8.04	15.50	15.74
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.45		9.75		15.53	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	11.76					
Intersection LOS	B					
Intersection V/C	0.695					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.364	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.985	4.474
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.667

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	688	0	0	756	71	0	0	0	107	327	252
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	688	0	0	756	71	0	0	0	107	327	252
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	172	0	0	189	18	0	0	0	27	82	63
Total Analysis Volume [veh/h]	28	688	0	0	756	71	0	0	0	107	327	252
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	35	0	0	25	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	37	37	37	37		37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	17	12	12		11	11
g / C, Green / Cycle	0.03	0.47	0.31	0.31		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.02	0.19	0.22	0.23		0.21	0.21
s, saturation flow rate [veh/h]	1781	3560	1870	1815		1844	1487
c, Capacity [veh/h]	62	1670	586	569		533	430
d1, Uniform Delay [s]	17.62	6.50	11.26	11.36		11.83	11.86
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.12	0.16	1.57	1.79		1.76	2.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.41	0.71	0.73		0.71	0.72
d, Delay for Lane Group [s/veh]	22.73	6.67	12.83	13.15		13.58	14.10
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.29	1.14	2.48	2.53		2.37	1.99
50th-Percentile Queue Length [ft]	7.21	28.50	61.98	63.15		59.27	49.78
95th-Percentile Queue Length [veh]	0.52	2.05	4.46	4.55		4.27	3.58
95th-Percentile Queue Length [ft]	12.98	51.29	111.57	113.68		106.69	89.61

Movement, Approach, & Intersection Results

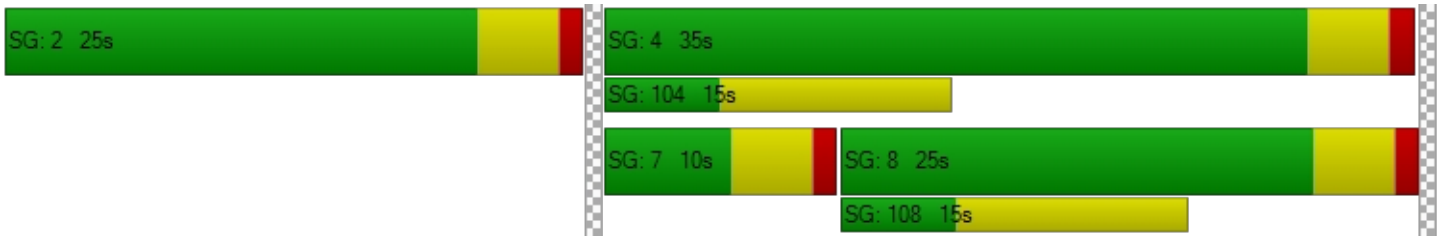
d_M, Delay for Movement [s/veh]	22.73	6.67	0.00	0.00	12.98	13.15	0.00	0.00	0.00	13.58	13.67	14.10
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	7.29			12.99			0.00			13.82		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.42											
Intersection LOS	B											
Intersection V/C	0.667											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.903	2.030
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	683	0	683
d_b, Bicycle Delay [s]	7.25	13.00	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.150	2.242	4.132	2.126
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.572

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	629	69	158	763	0	29	72	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	629	69	158	763	0	29	72	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	157	17	40	191	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	629	69	158	763	0	29	72	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	29	29	29	29	29	29	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	9	9	4	17	3	3	
g / C, Green / Cycle	0.30	0.30	0.13	0.58	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.19	0.09	0.21	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1807	1781	3560	1781	1798	
c, Capacity [veh/h]	555	536	225	2060	195	197	
d1, Uniform Delay [s]	8.78	8.86	12.10	3.26	11.64	12.07	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.18	1.34	3.97	0.11	0.35	1.74	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.63	0.65	0.70	0.37	0.15	0.47	
d, Delay for Lane Group [s/veh]	9.97	10.20	16.07	3.37	11.98	13.81	
Lane Group LOS	A	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.36	1.39	0.96	0.27	0.14	0.51	
50th-Percentile Queue Length [ft]	34.00	34.68	23.99	6.74	3.59	12.78	
95th-Percentile Queue Length [veh]	2.45	2.50	1.73	0.49	0.26	0.92	
95th-Percentile Queue Length [ft]	61.20	62.43	43.19	12.13	6.47	23.00	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	10.07	10.20	16.07	3.37	0.00	11.98	13.81	13.81	0.00	0.00	0.00
Movement LOS		B	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]	10.08			5.55			13.38			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	7.92											
Intersection LOS	A											
Intersection V/C	0.572											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.473	0.000	1.755	1.696
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.135	2.319	1.761	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	971	168	179	1156	389	606
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	971	168	179	1156	389	606
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	243	42	45	289	97	152
Total Analysis Volume [veh/h]	971	168	179	1156	389	606
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	31	0	0	31	29	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	19	19	12	12	12
g / C, Green / Cycle	0.47	0.47	0.47	0.47	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.16	0.23	0.19	0.20	0.21
s, saturation flow rate [veh/h]	5094	1589	1124	5094	1781	1620	1589
c, Capacity [veh/h]	2396	748	516	2396	545	495	486
d1, Uniform Delay [s]	6.97	6.30	11.71	7.29	11.90	12.18	12.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.15	0.40	0.15	1.11	1.58	1.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.22	0.35	0.48	0.61	0.67	0.68
d, Delay for Lane Group [s/veh]	7.08	6.45	12.11	7.44	13.01	13.76	13.94
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.22	0.60	0.55	1.53	2.15	2.25	2.27
50th-Percentile Queue Length [ft]	30.62	14.88	13.76	38.24	53.74	56.13	56.69
95th-Percentile Queue Length [veh]	2.20	1.07	0.99	2.75	3.87	4.04	4.08
95th-Percentile Queue Length [ft]	55.11	26.78	24.77	68.83	96.72	101.03	102.05

Movement, Approach, & Intersection Results

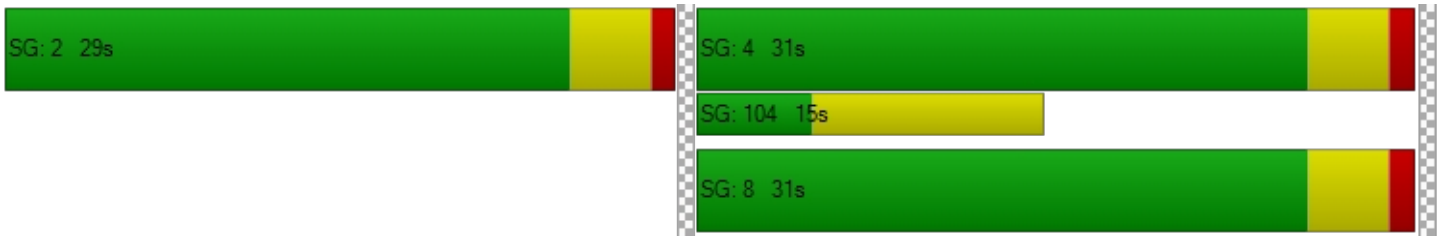
d_M, Delay for Movement [s/veh]	7.08	6.45	12.11	7.44	13.12	13.86
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.98		8.07		13.57	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.29					
Intersection LOS	A					
Intersection V/C	0.544					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.797
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.759	4.867	5.774
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	475	1219	0	0	862	289	0	0	0	106	0	506
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	475	1219	0	0	862	289	0	0	0	106	0	506
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	305	0	0	216	72	0	0	0	27	0	127
Total Analysis Volume [veh/h]	475	1219	0	0	862	289	0	0	0	106	0	506
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	34	0	0	20	0	0	0	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	34	34	34		34	34
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	8	22	10		3	3
g / C, Green / Cycle	0.22	0.64	0.29		0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.14	0.34	0.17		0.03	0.03
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	771	2284	1459		168	168
d1, Uniform Delay [s]	11.91	3.33	10.44		14.40	14.40
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.80	0.19	0.38		1.07	1.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.53	0.59		0.32	0.32
d, Delay for Lane Group [s/veh]	12.72	3.52	10.82		15.47	15.47
Lane Group LOS	B	A	B		B	B
Critical Lane Group	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	1.31	0.53	1.38		0.36	0.36
50th-Percentile Queue Length [ft]	32.77	13.15	34.58		8.97	8.97
95th-Percentile Queue Length [veh]	2.36	0.95	2.49		0.65	0.65
95th-Percentile Queue Length [ft]	58.98	23.66	62.24		16.15	16.15

Movement, Approach, & Intersection Results

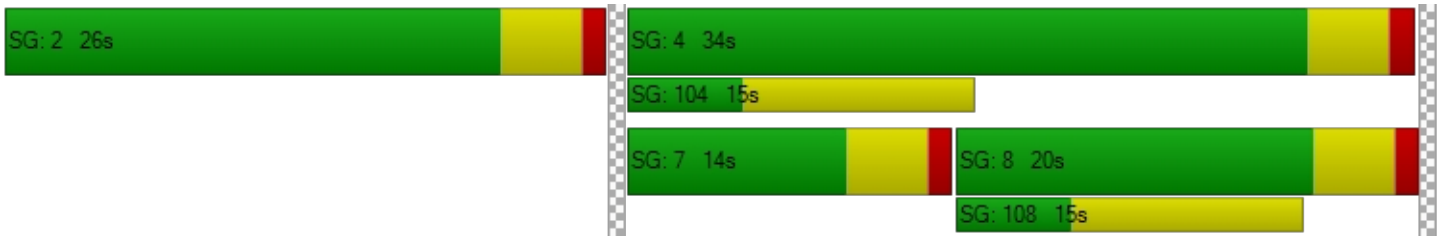
d_M, Delay for Movement [s/veh]	12.72	3.52	0.00	0.00	10.82	0.00	0.00	0.00	0.00	15.47	15.47	0.00
Movement LOS	B	A			B					B	B	
d_A, Approach Delay [s/veh]	6.10			10.82			0.00			15.47		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	8.00											
Intersection LOS	A											
Intersection V/C	0.576											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.927	1.955
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	983	517	0	717
d_b, Bicycle Delay [s]	7.75	16.50	30.00	12.35
l_b,int, Bicycle LOS Score for Intersection	2.957	2.034	4.132	1.735
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	26	1115	140	0	616	355	505	32	594	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1115	140	0	616	355	505	32	594	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	279	35	0	154	89	126	8	149	0	0	0
Total Analysis Volume [veh/h]	26	1115	140	0	616	355	505	32	594	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	30	0	0	20	0	0	30	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	31	31	31	31	31	31	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	1	14	14	9	7	7	
g / C, Green / Cycle	0.03	0.46	0.46	0.28	0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.01	0.34	0.34	0.17	0.15	0.01	
s, saturation flow rate [veh/h]	1781	1870	1798	3560	3459	3560	
c, Capacity [veh/h]	59	863	830	1002	848	873	
d1, Uniform Delay [s]	14.55	6.76	6.77	9.58	10.23	8.82	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	5.01	1.27	1.34	0.62	0.67	0.02	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.44	0.74	0.74	0.61	0.60	0.04	
d, Delay for Lane Group [s/veh]	19.56	8.03	8.11	10.20	10.91	8.84	
Lane Group LOS	B	A	A	B	B	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.22	1.95	1.90	1.29	1.12	0.06	
50th-Percentile Queue Length [ft]	5.58	48.68	47.44	32.17	28.06	1.48	
95th-Percentile Queue Length [veh]	0.40	3.50	3.42	2.32	2.02	0.11	
95th-Percentile Queue Length [ft]	10.04	87.62	85.39	57.90	50.51	2.66	

Movement, Approach, & Intersection Results

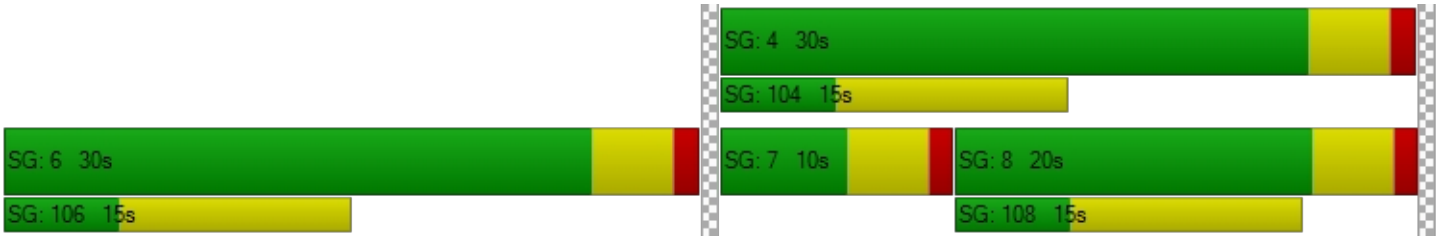
d_M, Delay for Movement [s/veh]	19.56	8.06	8.11	0.00	10.20	0.00	10.91	8.84	0.00	0.00	0.00	0.00
Movement LOS	B	A	A		B		B	A				
d_A, Approach Delay [s/veh]	8.30			10.20			10.78			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.33											
Intersection LOS	A											
Intersection V/C	0.805											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.650	0.000	2.525	1.779
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	517	850	0
d_b, Bicycle Delay [s]	9.92	16.50	9.92	30.00
l_b,int, Bicycle LOS Score for Intersection	2.616	2.068	2.003	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	565	110	66	528	0	0	0	0	483	0	409
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	565	110	66	528	0	0	0	0	483	0	409
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	141	28	17	132	0	0	0	0	121	0	102
Total Analysis Volume [veh/h]	0	565	110	66	528	0	0	0	0	483	0	409
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	22	0	10	22	0	0	0	0	28	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	41	41	41	41	41		41	41
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	11	11	3	13		15	15
g / C, Green / Cycle	0.00	0.26	0.26	0.06	0.32		0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.19	0.04	0.15		0.27	0.26
s, saturation flow rate [veh/h]	1781	1870	1766	1781	3560		1781	1589
c, Capacity [veh/h]	0	484	457	116	1154		626	559
d1, Uniform Delay [s]	0.00	14.03	14.05	18.89	11.17		12.01	11.79
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	1.99	2.14	4.31	0.28		2.05	1.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.72	0.72	0.57	0.46		0.77	0.73
d, Delay for Lane Group [s/veh]	0.00	16.02	16.19	23.20	11.45		14.06	13.66
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.67	2.56	0.68	1.57		3.40	2.82
50th-Percentile Queue Length [ft]	0.00	66.75	63.89	16.98	39.16		84.96	70.43
95th-Percentile Queue Length [veh]	0.00	4.81	4.60	1.22	2.82		6.12	5.07
95th-Percentile Queue Length [ft]	0.00	120.16	114.99	30.56	70.49		152.92	126.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.08	16.19	23.20	11.45	0.00	0.00	0.00	0.00	14.06	0.00	13.66
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	16.10			12.76			0.00			13.88		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	14.26											
Intersection LOS	B											
Intersection V/C	0.696											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.268
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.116	2.050	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.481

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	164	913	0	0	592	237
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	164	913	0	0	592	237
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	41	228	0	0	148	59
Total Analysis Volume [veh/h]	0	0	0	0	0	0	164	913	0	0	592	237
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	0	0	20	36	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	11	11	0	7	7
g / C, Green / Cycle	0.00		0.14	0.45	0.45	0.00	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.24	0.24	0.00	0.17	0.15
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		484	836	836	1	1095	489
d1, Uniform Delay [s]	0.00		9.50	4.95	4.95	0.00	7.03	6.89
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.41	0.56	0.56	0.00	0.42	0.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.34	0.55	0.55	0.00	0.54	0.48
d, Delay for Lane Group [s/veh]	0.00		9.91	5.51	5.51	0.00	7.45	7.64
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.28	0.66	0.66	0.00	0.71	0.61
50th-Percentile Queue Length [ft]	0.00		7.03	16.38	16.38	0.00	17.65	15.13
95th-Percentile Queue Length [veh]	0.00		0.51	1.18	1.18	0.00	1.27	1.09
95th-Percentile Queue Length [ft]	0.00		12.65	29.48	29.48	0.00	31.76	27.24

Movement, Approach, & Intersection Results

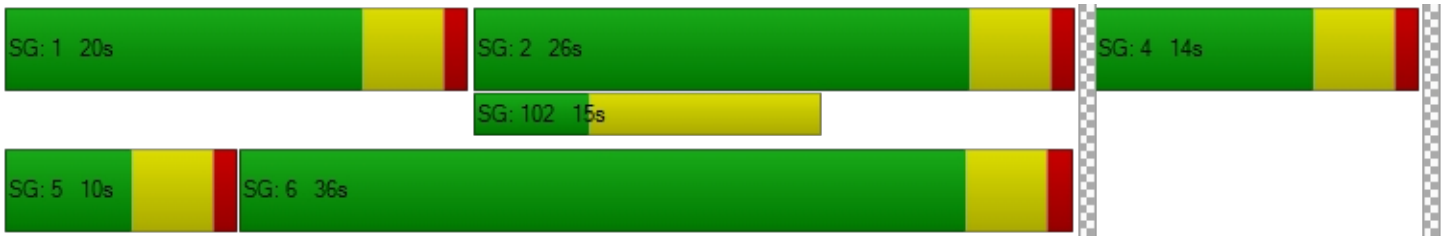
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.91	5.51	5.51	0.00	7.45	7.64
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.18			7.50		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.76											
Intersection LOS	A											
Intersection V/C	0.481											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.891	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	0	1050	717
d_b, Bicycle Delay [s]	21.25	30.00	6.77	12.35
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.448	2.244
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	14.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.828

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	278	747	0	761	617	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	278	747	0	761	617	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	187	0	190	154	0
Total Analysis Volume [veh/h]	278	747	0	761	617	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	39	0	0	21	21	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	46	46	46	46
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	24	24	13	13
g / C, Green / Cycle	0.52	0.52	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.16	0.47	0.21	0.12
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	930	830	1005	1438
d1, Uniform Delay [s]	6.23	9.91	15.09	13.50
k, delay calibration	0.11	0.24	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.18	7.89	1.19	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.90	0.76	0.43
d, Delay for Lane Group [s/veh]	6.40	17.80	16.28	13.70
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	1.10	6.35	3.20	1.50
50th-Percentile Queue Length [ft]	27.61	158.69	80.09	37.39
95th-Percentile Queue Length [veh]	1.99	10.48	5.77	2.69
95th-Percentile Queue Length [ft]	49.70	261.98	144.16	67.30

Movement, Approach, & Intersection Results

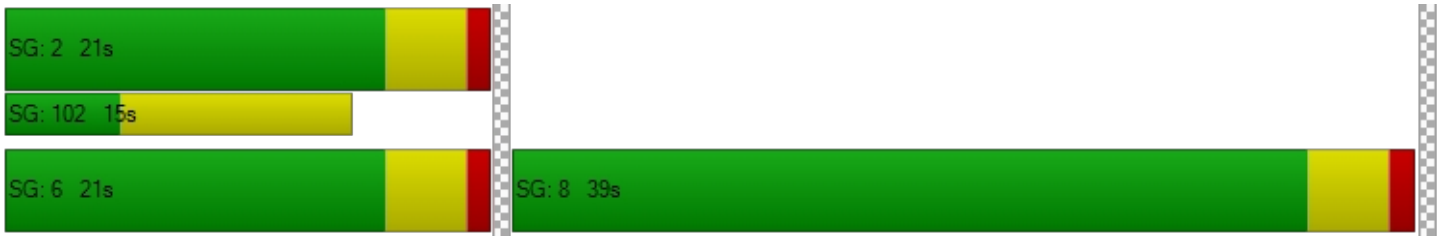
d_M, Delay for Movement [s/veh]	6.40	17.80	0.00	16.28	13.70	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	14.71		16.28		13.70	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	14.95					
Intersection LOS	B					
Intersection V/C	0.828					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.195	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.760	4.472
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	59.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.103

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	369	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	369	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	92	24	195	82
Total Analysis Volume [veh/h]	80	111	369	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	458	502	455	486	554	558
Degree of Utilization, x	0.17	0.22	0.81	0.20	1.10	0.99

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.56	0.73	17.99	14.19
95th-Percentile Queue Length [ft]	15.67	20.93	189.01	18.22	449.70	354.72
Approach Delay [s/veh]	12.03		31.53		79.14	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	59.33					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.732

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	692	605	415	194	605	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	692	605	415	194	605	225
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	173	151	104	49	151	56
Total Analysis Volume [veh/h]	692	605	415	194	605	225
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	18	38	20	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	14	28	10	10	16	16
g / C, Green / Cycle	0.26	0.53	0.18	0.18	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.20	0.17	0.12	0.12	0.24	0.24
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1670
c, Capacity [veh/h]	908	1875	639	285	542	508
d1, Uniform Delay [s]	18.09	7.18	20.28	20.41	16.88	17.05
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.35	0.10	1.12	2.84	2.47	3.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.32	0.65	0.68	0.78	0.80
d, Delay for Lane Group [s/veh]	19.44	7.28	21.40	23.25	19.35	20.07
Lane Group LOS	B	A	C	C	B	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	3.63	1.52	2.26	2.26	4.45	4.41
50th-Percentile Queue Length [ft]	90.64	37.95	56.58	56.52	111.26	110.24
95th-Percentile Queue Length [veh]	6.53	2.73	4.07	4.07	7.91	7.85
95th-Percentile Queue Length [ft]	163.15	68.30	101.84	101.73	197.75	196.33

Movement, Approach, & Intersection Results

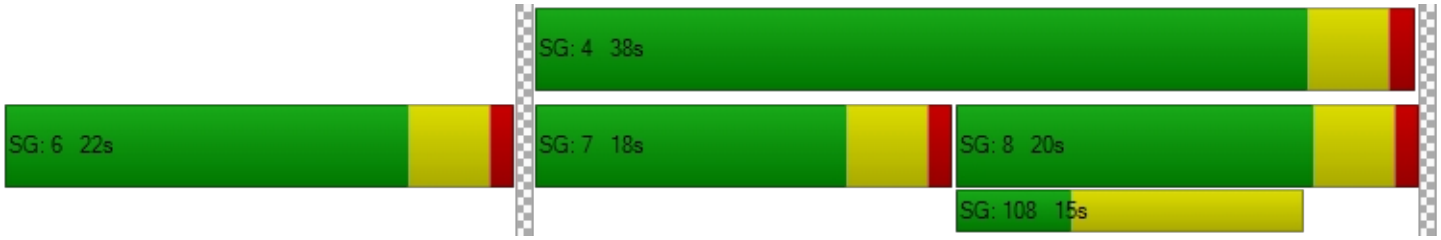
d_M, Delay for Movement [s/veh]	19.44	7.28	21.40	23.25	19.57	20.07
Movement LOS	B	A	C	C	B	C
d_A, Approach Delay [s/veh]	13.77		21.99		19.71	
Approach LOS	B		C		B	
d_I, Intersection Delay [s/veh]	17.40					
Intersection LOS	B					
Intersection V/C	0.732					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.530
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	5.202	4.635	5.502
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	281	255	282	331	500	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	281	255	282	331	500	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	64	71	83	125	22
Total Analysis Volume [veh/h]	281	255	282	331	500	89
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	36	36	36	36	36	36
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	9	5	19	9	9
g / C, Green / Cycle	0.24	0.24	0.15	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.16	0.08	0.09	0.16	0.17
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	426	381	503	1829	458	434
d1, Uniform Delay [s]	12.52	12.56	14.49	4.75	12.34	12.46
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.74	2.05	0.98	0.05	1.52	1.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.67	0.56	0.18	0.64	0.68
d, Delay for Lane Group [s/veh]	14.26	14.60	15.47	4.80	13.86	14.33
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.80	1.67	0.95	0.38	1.85	1.90
50th-Percentile Queue Length [ft]	45.12	41.78	23.74	9.54	46.24	47.43
95th-Percentile Queue Length [veh]	3.25	3.01	1.71	0.69	3.33	3.42
95th-Percentile Queue Length [ft]	81.21	75.21	42.72	17.17	83.23	85.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.26	14.60	15.47	4.80	14.05	14.33
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.42		9.71		14.09	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.65					
Intersection LOS	B					
Intersection V/C	0.609					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.333	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.638	4.618
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.776

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	713	0	0	1320	93	0	0	0	102	122	269
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	713	0	0	1320	93	0	0	0	102	122	269
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	178	0	0	330	23	0	0	0	26	31	67
Total Analysis Volume [veh/h]	21	713	0	0	1320	93	0	0	0	102	122	269
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	42	0	0	32	0	0	0	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	49	49	49	49		49	49
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	28	22	22		12	12
g / C, Green / Cycle	0.03	0.57	0.46	0.46		0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.38	0.39		0.12	0.19
s, saturation flow rate [veh/h]	1781	3560	1870	1828		1828	1446
c, Capacity [veh/h]	46	2045	853	834		441	349
d1, Uniform Delay [s]	23.43	5.53	11.59	11.75		16.01	17.26
k, delay calibration	0.11	0.11	0.16	0.17		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.94	0.10	3.13	3.87		0.91	3.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.35	0.83	0.85		0.51	0.77
d, Delay for Lane Group [s/veh]	30.36	5.63	14.72	15.63		16.91	20.88
Lane Group LOS	C	A	B	B		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.31	1.31	5.81	6.04		1.99	2.79
50th-Percentile Queue Length [ft]	7.67	32.69	145.33	151.00		49.82	69.69
95th-Percentile Queue Length [veh]	0.55	2.35	9.77	10.07		3.59	5.02
95th-Percentile Queue Length [ft]	13.81	58.84	244.18	251.77		89.68	125.44

Movement, Approach, & Intersection Results

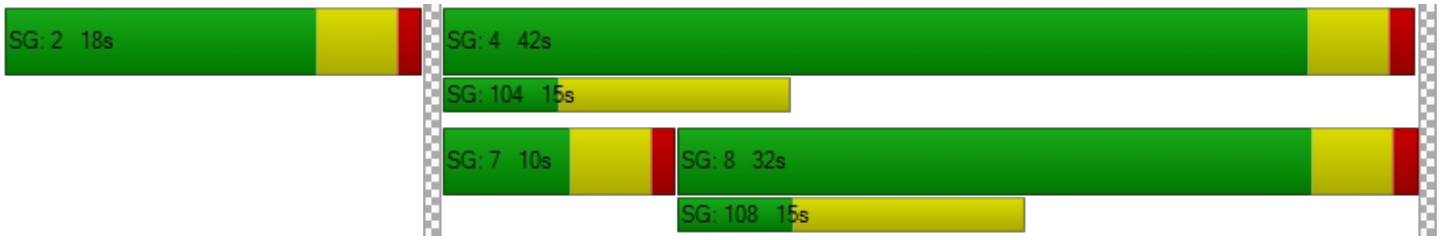
d_M, Delay for Movement [s/veh]	30.36	5.63	0.00	0.00	15.14	15.63	0.00	0.00	0.00	16.91	16.91	20.88
Movement LOS	C	A			B	B				B	B	C
d_A, Approach Delay [s/veh]	6.34			15.18			0.00			19.08		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	13.45											
Intersection LOS	B											
Intersection V/C	0.776											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.811	1.936
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1250	917	0	450
d_b, Bicycle Delay [s]	4.22	8.80	30.00	18.02
l_b,int, Bicycle LOS Score for Intersection	2.165	2.725	4.132	1.966
Bicycle LOS	B	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.765

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	677	150	308	1115	0	62	279	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	677	150	308	1115	0	62	279	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	169	38	77	279	0	16	70	11	0	0	0
Total Analysis Volume [veh/h]	0	677	150	308	1115	0	62	279	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	51	51	51	51	51	51	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	15	15	11	30	11	11	
g / C, Green / Cycle	0.30	0.30	0.22	0.60	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.22	0.24	0.17	0.31	0.03	0.18	
s, saturation flow rate [veh/h]	1870	1757	1781	3560	1781	1828	
c, Capacity [veh/h]	554	521	384	2138	396	406	
d1, Uniform Delay [s]	16.13	16.43	18.88	5.89	15.91	18.63	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.03	2.79	3.93	0.20	0.18	3.49	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.75	0.79	0.80	0.52	0.16	0.79	
d, Delay for Lane Group [s/veh]	18.16	19.23	22.81	6.09	16.09	22.12	
Lane Group LOS	B	B	C	A	B	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	4.04	4.20	3.46	2.28	0.54	3.53	
50th-Percentile Queue Length [ft]	100.93	104.95	86.39	57.01	13.45	88.31	
95th-Percentile Queue Length [veh]	7.27	7.56	6.22	4.10	0.97	6.36	
95th-Percentile Queue Length [ft]	181.67	188.91	155.50	102.62	24.20	158.95	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	18.58	19.23	22.81	6.09	0.00	16.09	22.12	22.12	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	C	C			
d_A, Approach Delay [s/veh]	18.69			9.71			21.14			0.00		
Approach LOS	B			A			C			A		
d_I, Intersection Delay [s/veh]	14.20											
Intersection LOS	B											
Intersection V/C	0.765											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.595	0.000	1.882	2.123
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.242	2.734	2.192	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1262	230	165	1161	421	453
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1262	230	165	1161	421	453
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	316	58	41	290	105	113
Total Analysis Volume [veh/h]	1262	230	165	1161	421	453
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	32	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	22	22	22	22	11	11	11
g / C, Green / Cycle	0.52	0.52	0.52	0.52	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.25	0.14	0.19	0.23	0.17	0.17	0.18
s, saturation flow rate [veh/h]	5094	1589	853	5094	1781	1665	1589
c, Capacity [veh/h]	2645	825	443	2645	476	445	425
d1, Uniform Delay [s]	6.47	5.69	12.12	6.31	13.59	13.71	13.79
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.18	0.52	0.12	1.36	1.63	1.85
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.28	0.37	0.44	0.63	0.65	0.67
d, Delay for Lane Group [s/veh]	6.61	5.88	12.64	6.42	14.95	15.33	15.64
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.55	0.77	0.55	1.39	2.22	2.20	2.20
50th-Percentile Queue Length [ft]	38.80	19.31	13.74	34.75	55.42	55.08	54.88
95th-Percentile Queue Length [veh]	2.79	1.39	0.99	2.50	3.99	3.97	3.95
95th-Percentile Queue Length [ft]	69.84	34.75	24.74	62.55	99.75	99.14	98.78

Movement, Approach, & Intersection Results

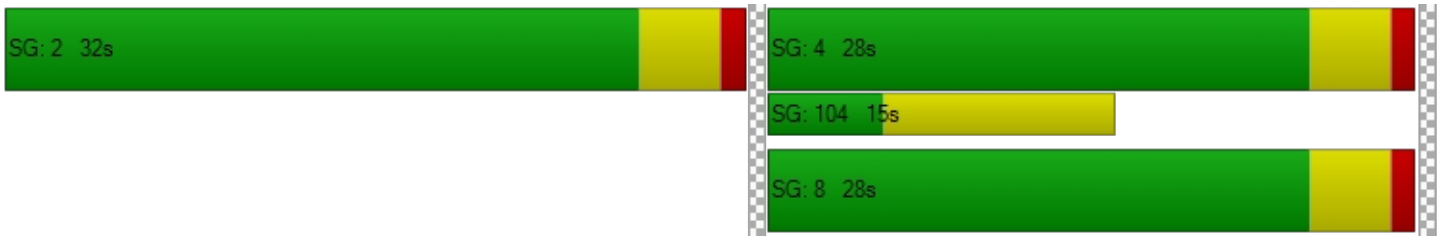
d_M, Delay for Movement [s/veh]	6.61	5.88	12.64	6.42	15.07	15.53
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.50		7.20		15.30	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.83					
Intersection LOS	A					
Intersection V/C	0.528					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.763
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.953	4.862	5.575
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.615

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	348	1197	0	0	1516	535	0	0	0	186	2	502
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	1197	0	0	1516	535	0	0	0	186	2	502
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	299	0	0	379	134	0	0	0	47	1	126
Total Analysis Volume [veh/h]	348	1197	0	0	1516	535	0	0	0	186	2	502
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	45	45	45		45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	7	32	20		5	5
g / C, Green / Cycle	0.16	0.70	0.44		0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.10	0.34	0.30		0.05	0.05
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1783
c, Capacity [veh/h]	551	2492	2247		179	180
d1, Uniform Delay [s]	17.75	3.06	10.04		19.28	19.28
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.20	0.14	0.36		2.36	2.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.48	0.67		0.52	0.52
d, Delay for Lane Group [s/veh]	18.95	3.21	10.40		21.64	21.63
Lane Group LOS	B	A	B		C	C
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.57	0.84	3.04		0.95	0.95
50th-Percentile Queue Length [ft]	39.28	21.00	75.89		23.71	23.72
95th-Percentile Queue Length [veh]	2.83	1.51	5.46		1.71	1.71
95th-Percentile Queue Length [ft]	70.70	37.80	136.60		42.68	42.70

Movement, Approach, & Intersection Results

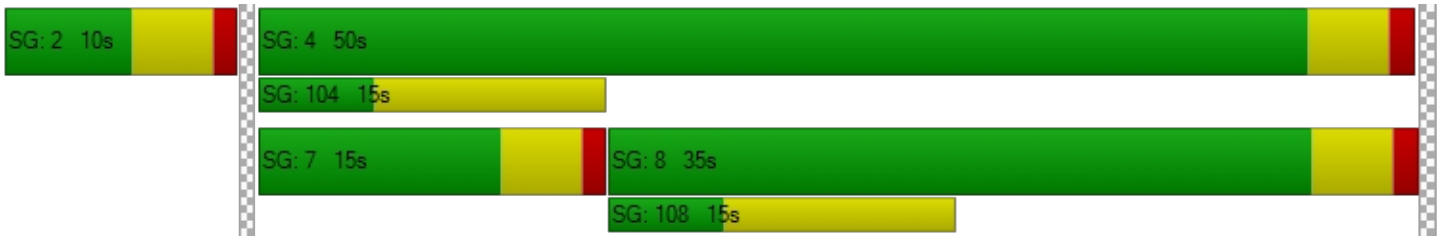
d_M, Delay for Movement [s/veh]	18.95	3.21	0.00	0.00	10.40	0.00	0.00	0.00	0.00	21.63	21.63	0.00
Movement LOS	B	A			B					C	C	
d_A, Approach Delay [s/veh]	6.75			10.40			0.00			21.63		
Approach LOS	A			B			A			C		
d_I, Intersection Delay [s/veh]	9.32											
Intersection LOS	A											
Intersection V/C	0.615											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.866	1.982
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.834	2.393	4.132	1.870
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.670

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	53	1164	186	0	1179	528	345	226	457	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	1164	186	0	1179	528	345	226	457	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	291	47	0	295	132	86	57	114	0	0	0
Total Analysis Volume [veh/h]	53	1164	186	0	1179	528	345	226	457	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	40	40	40	40	40	40	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	2	24	24	18	7	7	
g / C, Green / Cycle	0.06	0.60	0.60	0.43	0.18	0.18	
(v / s)_i Volume / Saturation Flow Rate	0.03	0.37	0.37	0.33	0.10	0.06	
s, saturation flow rate [veh/h]	1781	1870	1782	3560	3459	3560	
c, Capacity [veh/h]	100	1123	1070	1543	614	632	
d1, Uniform Delay [s]	18.62	5.12	5.15	9.74	15.25	14.66	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	4.24	0.55	0.59	0.81	0.81	0.34	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.53	0.61	0.62	0.76	0.56	0.36	
d, Delay for Lane Group [s/veh]	22.87	5.66	5.73	10.55	16.06	15.00	
Lane Group LOS	C	A	A	B	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.54	1.92	1.87	3.25	1.29	0.80	
50th-Percentile Queue Length [ft]	13.50	48.00	46.65	81.17	32.19	19.94	
95th-Percentile Queue Length [veh]	0.97	3.46	3.36	5.84	2.32	1.44	
95th-Percentile Queue Length [ft]	24.31	86.40	83.98	146.10	57.95	35.89	

Movement, Approach, & Intersection Results

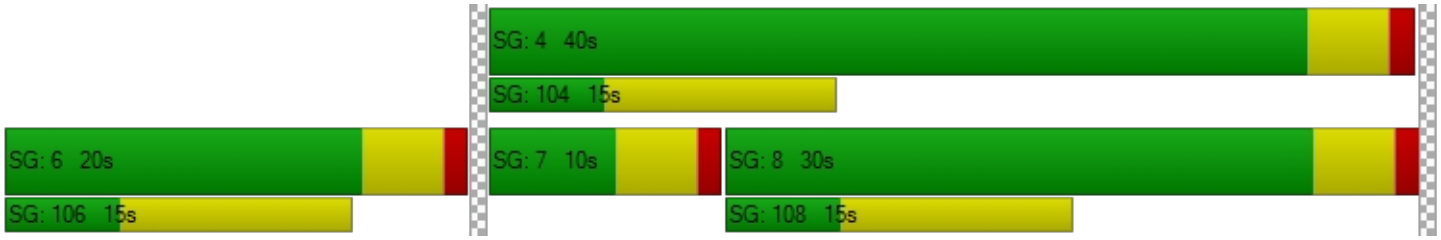
d_M, Delay for Movement [s/veh]	22.87	5.69	5.73	0.00	10.55	0.00	16.06	15.00	0.00	0.00	0.00	0.00
Movement LOS	C	A	A		B		B	B				
d_A, Approach Delay [s/veh]	6.35			10.55			15.64			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.60											
Intersection LOS	A											
Intersection V/C	0.670											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.784	0.000	2.535	1.896
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.717	2.532	2.031	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.689

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	630	137	109	787	0	0	0	0	255	0	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	630	137	109	787	0	0	0	0	255	0	329
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	158	34	27	197	0	0	0	0	64	0	82
Total Analysis Volume [veh/h]	1	630	137	109	787	0	0	0	0	255	0	329
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	25	0	11	26	0	0	0	0	24	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	11	11	4	15		11	11
g / C, Green / Cycle	0.00	0.29	0.29	0.09	0.38		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.21	0.21	0.06	0.22		0.14	0.21
s, saturation flow rate [veh/h]	1781	1870	1756	1781	3560		1781	1589
c, Capacity [veh/h]	3	544	511	159	1349		498	445
d1, Uniform Delay [s]	19.81	12.65	12.66	17.54	9.84		12.02	12.99
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	61.19	1.86	2.00	5.14	0.40		0.82	2.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.73	0.73	0.69	0.58		0.51	0.74
d, Delay for Lane Group [s/veh]	81.00	14.52	14.67	22.68	10.24		12.84	15.43
Lane Group LOS	F	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.74	2.60	1.05	2.07		1.61	2.39
50th-Percentile Queue Length [ft]	1.41	68.52	65.03	26.34	51.74		40.28	59.74
95th-Percentile Queue Length [veh]	0.10	4.93	4.68	1.90	3.73		2.90	4.30
95th-Percentile Queue Length [ft]	2.54	123.33	117.05	47.42	93.13		72.50	107.53

Movement, Approach, & Intersection Results

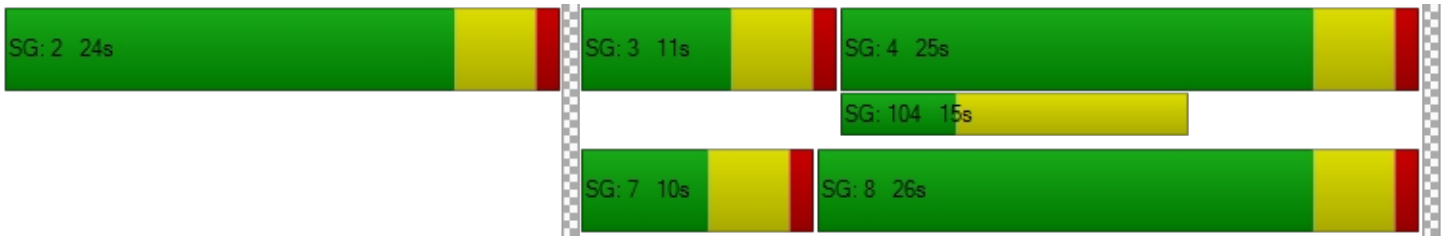
d_M, Delay for Movement [s/veh]	81.00	14.57	14.67	22.68	10.24	0.00	0.00	0.00	0.00	12.84	0.00	15.43
Movement LOS	F	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.68			11.76			0.00			14.30		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.41											
Intersection LOS	B											
Intersection V/C	0.689											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.191
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	717	0	0
d_b, Bicycle Delay [s]	13.00	12.35	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.193	2.299	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.586

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	459	1336	0	0	743	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	459	1336	0	0	743	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	115	334	0	0	186	82
Total Analysis Volume [veh/h]	0	0	0	0	0	0	459	1336	0	0	743	327
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	17	0	0	0	0	21	33	0	10	22	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	31		31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		7	17	17	0	10	10
g / C, Green / Cycle	0.00		0.22	0.56	0.56	0.00	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.36	0.36	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		777	1051	1051	0	1201	536
d1, Uniform Delay [s]	0.00		10.69	4.61	4.61	0.00	8.56	8.53
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.72	0.64	0.64	0.00	0.52	1.13
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.59	0.64	0.64	0.00	0.62	0.61
d, Delay for Lane Group [s/veh]	0.00		11.41	5.25	5.25	0.00	9.08	9.65
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		1.07	1.09	1.09	0.00	1.39	1.31
50th-Percentile Queue Length [ft]	0.00		26.72	27.24	27.24	0.00	34.85	32.84
95th-Percentile Queue Length [veh]	0.00		1.92	1.96	1.96	0.00	2.51	2.36
95th-Percentile Queue Length [ft]	0.00		48.09	49.04	49.04	0.00	62.73	59.11

Movement, Approach, & Intersection Results

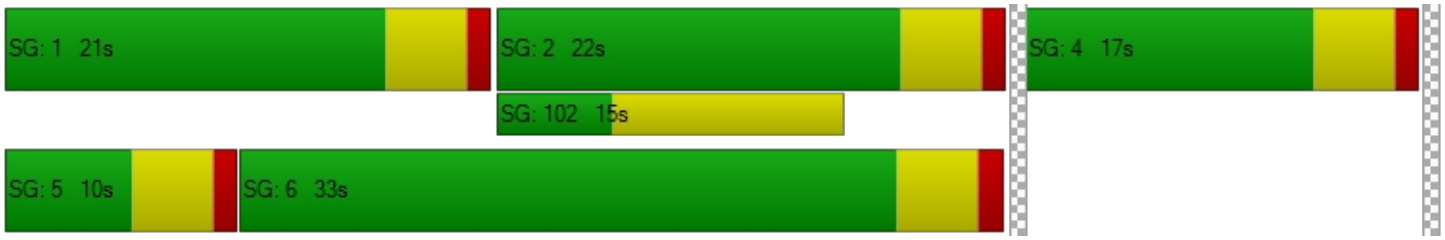
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	11.41	5.25	5.25	0.00	9.08	9.65
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.82			9.26		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.73											
Intersection LOS	A											
Intersection V/C	0.586											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.079	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	0	950	583
d_b, Bicycle Delay [s]	18.80	30.00	8.27	15.05
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	3.040	2.442
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.819

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	385	471	0	1419	737	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	385	471	0	1419	737	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	96	118	0	355	184	0
Total Analysis Volume [veh/h]	385	471	0	1419	737	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	26	0	0	34	34	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	53	53	53	53
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	25	25
g / C, Green / Cycle	0.35	0.35	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.22	0.30	0.40	0.14
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	631	563	1695	2425
d1, Uniform Delay [s]	14.10	15.71	12.09	8.50
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.96	3.39	1.16	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.84	0.84	0.30
d, Delay for Lane Group [s/veh]	15.06	19.09	13.26	8.57
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	3.41	4.94	5.94	1.40
50th-Percentile Queue Length [ft]	85.19	123.59	148.47	34.88
95th-Percentile Queue Length [veh]	6.13	8.59	9.94	2.51
95th-Percentile Queue Length [ft]	153.34	214.75	248.39	62.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.06	19.09	0.00	13.26	8.57	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	17.28		13.26		8.57	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	13.25					
Intersection LOS	B					
Intersection V/C	0.819					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.113	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.303	4.538
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	131.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.598

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	725	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	725	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	181	43	84	65
Total Analysis Volume [veh/h]	62	539	725	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	725	484	439	503
Degree of Utilization, x	0.13	1.03	1.60	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	40.61	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1015.32	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		245.08		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	130.97					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.730

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	508	424	897	303	447	139
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	508	424	897	303	447	139
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	127	106	224	76	112	35
Total Analysis Volume [veh/h]	508	424	897	303	447	139
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	16	41	25	0	19	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	54	54	54	54	54	54
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	11	33	18	18	12	12
g / C, Green / Cycle	0.20	0.61	0.33	0.33	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.15	0.12	0.25	0.19	0.17	0.17
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1682
c, Capacity [veh/h]	699	2177	1162	519	397	375
d1, Uniform Delay [s]	20.25	4.65	16.47	15.22	19.73	19.74
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.46	0.04	1.12	1.05	3.00	3.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.19	0.77	0.58	0.76	0.76
d, Delay for Lane Group [s/veh]	21.71	4.70	17.59	16.27	22.73	22.94
Lane Group LOS	C	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.86	0.73	4.53	2.87	3.52	3.36
50th-Percentile Queue Length [ft]	71.44	18.17	113.29	71.69	88.09	83.93
95th-Percentile Queue Length [veh]	5.14	1.31	8.02	5.16	6.34	6.04
95th-Percentile Queue Length [ft]	128.60	32.70	200.57	129.04	158.57	151.07

Movement, Approach, & Intersection Results

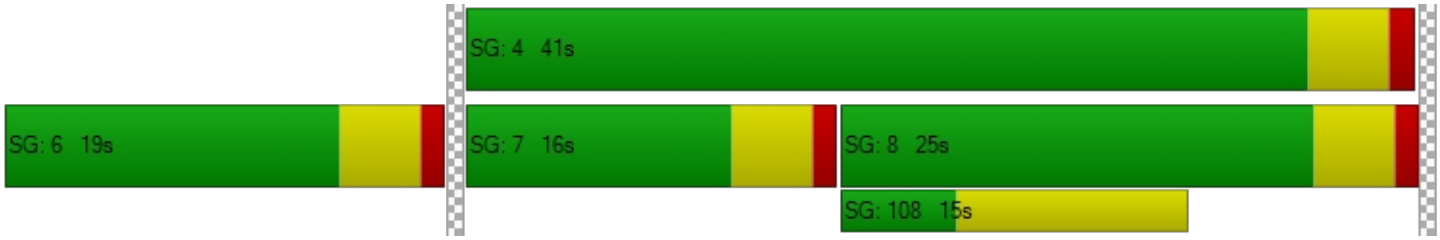
d_M, Delay for Movement [s/veh]	21.71	4.70	17.59	16.27	22.80	22.94
Movement LOS	C	A	B	B	C	C
d_A, Approach Delay [s/veh]	13.97		17.26		22.83	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	17.33					
Intersection LOS	B					
Intersection V/C	0.730					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.452
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.901	5.122	5.099
Bicycle LOS	E	F	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	430	343	227	823	356	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	430	343	227	823	356	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	86	57	206	89	16
Total Analysis Volume [veh/h]	430	343	227	823	356	63
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	5	16	7	7
g / C, Green / Cycle	0.33	0.33	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.22	0.07	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	582	519	424	1535	350	333
d1, Uniform Delay [s]	11.11	10.74	15.31	7.83	13.82	13.92
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.86	1.44	1.05	0.29	1.63	1.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.66	0.54	0.54	0.60	0.63
d, Delay for Lane Group [s/veh]	12.97	12.18	16.36	8.12	15.46	15.88
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.60	1.98	0.81	1.65	1.45	1.48
50th-Percentile Queue Length [ft]	64.92	49.49	20.21	41.32	36.32	37.10
95th-Percentile Queue Length [veh]	4.67	3.56	1.45	2.98	2.62	2.67
95th-Percentile Queue Length [ft]	116.85	89.08	36.37	74.38	65.38	66.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.97	12.18	16.36	8.12	15.63	15.88
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.62		9.90		15.67	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	11.92					
Intersection LOS	B					
Intersection V/C	0.699					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.371	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.999	4.478
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	11.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	28	710	0	0	779	71	0	0	0	107	327	259
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	710	0	0	779	71	0	0	0	107	327	259
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	178	0	0	195	18	0	0	0	27	82	65
Total Analysis Volume [veh/h]	28	710	0	0	779	71	0	0	0	107	327	259
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	35	0	0	25	0	0	0	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	38	38	38	38		38	38
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	18	12	12		11	11
g / C, Green / Cycle	0.03	0.47	0.32	0.32		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.23	0.23		0.21	0.21
s, saturation flow rate [veh/h]	1781	3560	1870	1816		1844	1483
c, Capacity [veh/h]	62	1681	596	579		535	431
d1, Uniform Delay [s]	17.94	6.59	11.38	11.48		12.04	12.07
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.15	0.17	1.60	1.82		1.79	2.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.42	0.71	0.73		0.71	0.72
d, Delay for Lane Group [s/veh]	23.09	6.76	12.98	13.30		13.83	14.36
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.29	1.21	2.61	2.66		2.47	2.06
50th-Percentile Queue Length [ft]	7.35	30.37	65.19	66.42		61.64	51.62
95th-Percentile Queue Length [veh]	0.53	2.19	4.69	4.78		4.44	3.72
95th-Percentile Queue Length [ft]	13.23	54.66	117.34	119.55		110.95	92.91

Movement, Approach, & Intersection Results

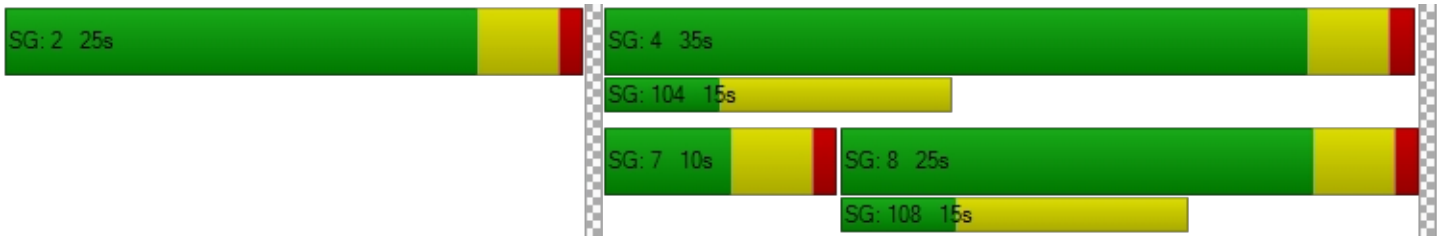
d_M, Delay for Movement [s/veh]	23.09	6.76	0.00	0.00	13.12	13.30	0.00	0.00	0.00	13.83	13.91	14.36
Movement LOS	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	7.38			13.14			0.00			14.07		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	11.56											
Intersection LOS	B											
Intersection V/C	0.673											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.903	2.033
Crosswalk LOS	F	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	683	0	683
d_b, Bicycle Delay [s]	7.25	13.00	30.00	13.00
l_b,int, Bicycle LOS Score for Intersection	2.168	2.261	4.132	2.131
Bicycle LOS	B	B	D	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.582

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	651	69	164	780	0	29	72	21	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	651	69	164	780	0	29	72	21	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	163	17	41	195	0	7	18	5	0	0	0
Total Analysis Volume [veh/h]	0	651	69	164	780	0	29	72	21	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	29	29	29	29	29	29	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	9	9	4	17	3	3	
g / C, Green / Cycle	0.30	0.30	0.13	0.58	0.11	0.11	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.20	0.09	0.22	0.02	0.05	
s, saturation flow rate [veh/h]	1870	1809	1781	3560	1781	1798	
c, Capacity [veh/h]	565	547	228	2079	194	196	
d1, Uniform Delay [s]	8.83	8.91	12.28	3.25	11.83	12.27	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.20	1.36	4.24	0.11	0.35	1.77	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.64	0.66	0.72	0.38	0.15	0.47	
d, Delay for Lane Group [s/veh]	10.03	10.26	16.51	3.36	12.18	14.04	
Lane Group LOS	B	B	B	A	B	B	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	1.43	1.46	1.03	0.28	0.15	0.52	
50th-Percentile Queue Length [ft]	35.69	36.40	25.64	7.02	3.68	13.07	
95th-Percentile Queue Length [veh]	2.57	2.62	1.85	0.51	0.26	0.94	
95th-Percentile Queue Length [ft]	64.24	65.52	46.16	12.64	6.62	23.52	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	10.14	10.26	16.51	3.36	0.00	12.18	14.04	14.04	0.00	0.00	0.00
Movement LOS		B	B	B	A		B	B	B			
d_A, Approach Delay [s/veh]	10.15			5.65			13.59			0.00		
Approach LOS	B			A			B			A		
d_I, Intersection Delay [s/veh]	8.00											
Intersection LOS	A											
Intersection V/C	0.582											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.482	0.000	1.755	1.701
Crosswalk LOS	B	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.154	2.338	1.761	4.132
Bicycle LOS	B	B	A	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	974	173	179	1160	392	606
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	974	173	179	1160	392	606
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	244	43	45	290	98	152
Total Analysis Volume [veh/h]	974	173	179	1160	392	606
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	31	0	0	31	29	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	40	40	40	40	40	40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	19	19	12	12	12
g / C, Green / Cycle	0.47	0.47	0.47	0.47	0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.16	0.23	0.19	0.21	0.21
s, saturation flow rate [veh/h]	5094	1589	1121	5094	1781	1621	1589
c, Capacity [veh/h]	2403	750	514	2403	542	493	484
d1, Uniform Delay [s]	6.94	6.30	11.77	7.27	11.97	12.24	12.31
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.16	0.40	0.15	1.13	1.61	1.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.23	0.35	0.48	0.61	0.67	0.69
d, Delay for Lane Group [s/veh]	7.05	6.45	12.17	7.42	13.10	13.86	14.05
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	No	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.23	0.62	0.55	1.54	2.17	2.27	2.29
50th-Percentile Queue Length [ft]	30.76	15.39	13.86	38.44	54.33	56.77	57.36
95th-Percentile Queue Length [veh]	2.21	1.11	1.00	2.77	3.91	4.09	4.13
95th-Percentile Queue Length [ft]	55.37	27.70	24.95	69.19	97.80	102.18	103.25

Movement, Approach, & Intersection Results

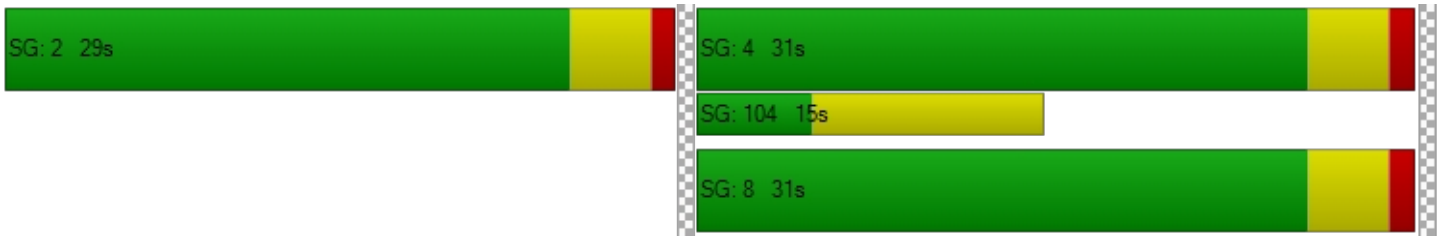
d_M, Delay for Movement [s/veh]	7.05	6.45	12.17	7.42	13.21	13.96
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.96		8.05		13.67	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	9.30					
Intersection LOS	A					
Intersection V/C	0.546					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.798
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.763	4.869	5.779
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.576

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	475	1221	0	0	865	291	0	0	0	106	0	509
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	475	1221	0	0	865	291	0	0	0	106	0	509
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	119	305	0	0	216	73	0	0	0	27	0	127
Total Analysis Volume [veh/h]	475	1221	0	0	865	291	0	0	0	106	0	509
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	14	34	0	0	20	0	0	0	0	0	26	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	34	34	34		34	34
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	8	22	10		3	3
g / C, Green / Cycle	0.22	0.64	0.29		0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.14	0.34	0.17		0.03	0.03
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1781
c, Capacity [veh/h]	771	2286	1462		168	168
d1, Uniform Delay [s]	11.93	3.33	10.44		14.42	14.42
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.81	0.19	0.38		1.07	1.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.53	0.59		0.32	0.32
d, Delay for Lane Group [s/veh]	12.74	3.52	10.82		15.49	15.49
Lane Group LOS	B	A	B		B	B
Critical Lane Group	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	1.31	0.53	1.39		0.36	0.36
50th-Percentile Queue Length [ft]	32.84	13.19	34.75		8.99	8.99
95th-Percentile Queue Length [veh]	2.36	0.95	2.50		0.65	0.65
95th-Percentile Queue Length [ft]	59.12	23.75	62.54		16.19	16.19

Movement, Approach, & Intersection Results

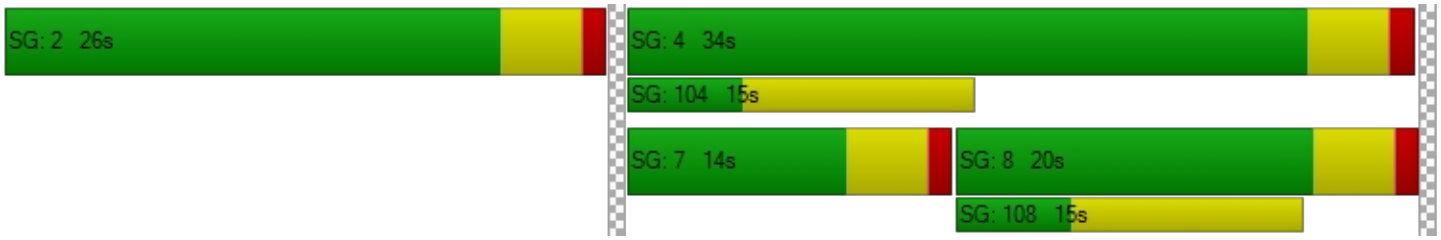
d_M, Delay for Movement [s/veh]	12.74	3.52	0.00	0.00	10.82	0.00	0.00	0.00	0.00	15.49	15.49	0.00
Movement LOS	B	A			B					B	B	
d_A, Approach Delay [s/veh]	6.10			10.82			0.00			15.49		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	8.01											
Intersection LOS	A											
Intersection V/C	0.576											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.927	1.955
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	983	517	0	717
d_b, Bicycle Delay [s]	7.75	16.50	30.00	12.35
l_b,int, Bicycle LOS Score for Intersection	2.959	2.035	4.132	1.735
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	26	1115	140	0	616	358	507	32	594	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	26	1115	140	0	616	358	507	32	594	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	279	35	0	154	90	127	8	149	0	0	0
Total Analysis Volume [veh/h]	26	1115	140	0	616	358	507	32	594	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	30	0	0	20	0	0	30	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	31	31	31	31	31	31	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	1	14	14	9	8	8	
g / C, Green / Cycle	0.03	0.46	0.46	0.28	0.25	0.25	
(v / s)_i Volume / Saturation Flow Rate	0.01	0.34	0.34	0.17	0.15	0.01	
s, saturation flow rate [veh/h]	1781	1870	1798	3560	3459	3560	
c, Capacity [veh/h]	59	863	829	1002	850	875	
d1, Uniform Delay [s]	14.57	6.77	6.79	9.59	10.24	8.82	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	5.01	1.27	1.34	0.62	0.67	0.02	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.44	0.74	0.74	0.61	0.60	0.04	
d, Delay for Lane Group [s/veh]	19.59	8.04	8.13	10.21	10.91	8.84	
Lane Group LOS	B	A	A	B	B	A	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.22	1.96	1.91	1.29	1.13	0.06	
50th-Percentile Queue Length [ft]	5.59	48.89	47.64	32.24	28.22	1.48	
95th-Percentile Queue Length [veh]	0.40	3.52	3.43	2.32	2.03	0.11	
95th-Percentile Queue Length [ft]	10.06	88.00	85.75	58.04	50.79	2.66	

Movement, Approach, & Intersection Results

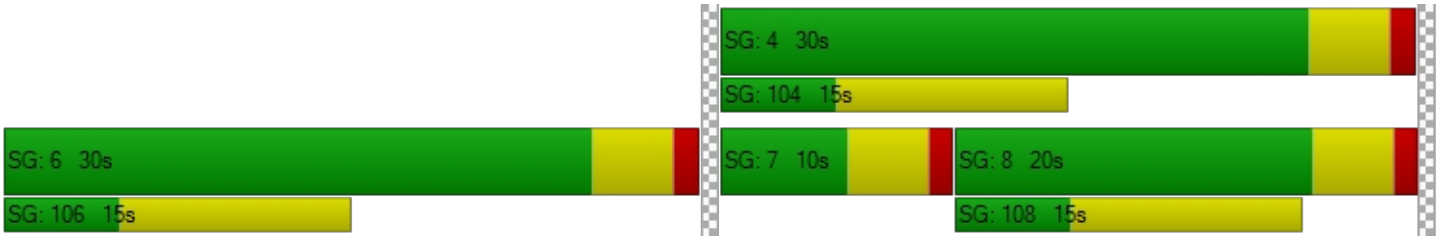
d_M, Delay for Movement [s/veh]	19.59	8.08	8.13	0.00	10.21	0.00	10.91	8.84	0.00	0.00	0.00	0.00
Movement LOS	B	A	A		B		B	A				
d_A, Approach Delay [s/veh]	8.32			10.21			10.79			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.34											
Intersection LOS	A											
Intersection V/C	0.805											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.650	0.000	2.525	1.779
Crosswalk LOS	B	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	517	850	0
d_b, Bicycle Delay [s]	9.92	16.50	9.92	30.00
l_b,int, Bicycle LOS Score for Intersection	2.616	2.068	2.004	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	14.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.701

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	0	572	121	66	536	0	0	0	0	486	0	409
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	572	121	66	536	0	0	0	0	486	0	409
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	143	30	17	134	0	0	0	0	122	0	102
Total Analysis Volume [veh/h]	0	572	121	66	536	0	0	0	0	486	0	409
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	22	0	10	22	0	0	0	0	28	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	42	42	42	42	42		42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	11	11	3	14		15	15
g / C, Green / Cycle	0.00	0.26	0.26	0.06	0.33		0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.00	0.19	0.19	0.04	0.15		0.27	0.26
s, saturation flow rate [veh/h]	1781	1870	1758	1781	3560		1781	1589
c, Capacity [veh/h]	0	493	464	116	1170		627	560
d1, Uniform Delay [s]	0.00	14.16	14.17	19.20	11.22		12.21	11.95
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	0.00	2.02	2.18	4.38	0.28		2.10	1.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.72	0.73	0.57	0.46		0.78	0.73
d, Delay for Lane Group [s/veh]	0.00	16.17	16.35	23.58	11.50		14.30	13.81
Lane Group LOS	A	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		Yes	No
50th-Percentile Queue Length [veh]	0.00	2.80	2.67	0.69	1.61		3.51	2.88
50th-Percentile Queue Length [ft]	0.00	69.95	66.67	17.31	40.37		87.64	71.91
95th-Percentile Queue Length [veh]	0.00	5.04	4.80	1.25	2.91		6.31	5.18
95th-Percentile Queue Length [ft]	0.00	125.91	120.01	31.16	72.67		157.75	129.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	16.24	16.35	23.58	11.50	0.00	0.00	0.00	0.00	14.30	0.00	13.81
Movement LOS	A	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	16.26			12.83			0.00			14.08		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	14.42											
Intersection LOS	B											
Intersection V/C	0.701											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.273
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	583	583	0	0
d_b, Bicycle Delay [s]	15.05	15.05	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.131	2.056	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.487

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			Yes			No			No		

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	164	929	0	0	600	241
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	164	929	0	0	600	241
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	41	232	0	0	150	60
Total Analysis Volume [veh/h]	0	0	0	0	0	0	164	929	0	0	600	241
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	14	0	0	0	0	20	36	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	24		24	24	24	24	24	24
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		3	11	11	0	8	8
g / C, Green / Cycle	0.00		0.14	0.45	0.45	0.00	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.00		0.05	0.25	0.25	0.00	0.17	0.15
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	1		483	840	840	1	1105	493
d1, Uniform Delay [s]	0.00		9.55	4.96	4.96	0.00	7.03	6.89
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.41	0.57	0.57	0.00	0.42	0.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.34	0.55	0.55	0.00	0.54	0.49
d, Delay for Lane Group [s/veh]	0.00		9.96	5.53	5.53	0.00	7.45	7.64
Lane Group LOS	A		A	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		0.28	0.67	0.67	0.00	0.72	0.62
50th-Percentile Queue Length [ft]	0.00		7.09	16.77	16.77	0.00	17.94	15.44
95th-Percentile Queue Length [veh]	0.00		0.51	1.21	1.21	0.00	1.29	1.11
95th-Percentile Queue Length [ft]	0.00		12.76	30.19	30.19	0.00	32.30	27.79

Movement, Approach, & Intersection Results

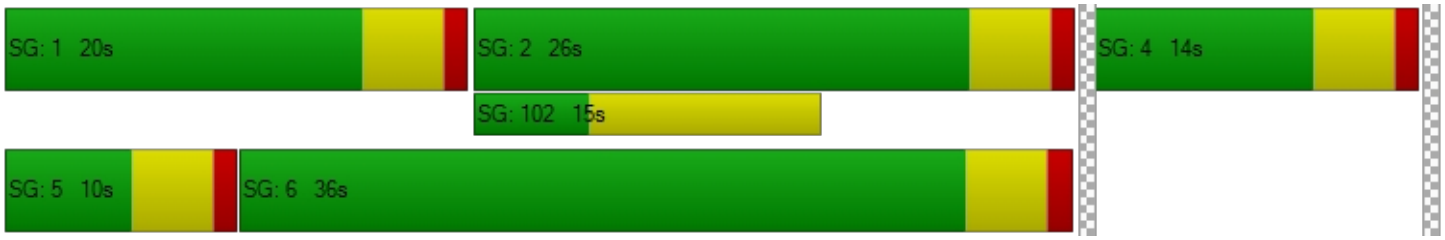
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	9.96	5.53	5.53	0.00	7.45	7.64
Movement LOS	A	A	A				A	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.19			7.50		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.76											
Intersection LOS	A											
Intersection V/C	0.487											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	1.893	0.000	0.000
Crosswalk LOS	F	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	317	0	1050	717
d_b, Bicycle Delay [s]	21.25	30.00	6.77	12.35
l_b,int, Bicycle LOS Score for Intersection	1.560	4.132	2.461	2.253
Bicycle LOS	A	D	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	15.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.830

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	283	747	0	772	625	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	283	747	0	772	625	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	187	0	193	156	0
Total Analysis Volume [veh/h]	283	747	0	772	625	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	39	0	0	21	21	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	46	46	46	46
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	24	24	13	13
g / C, Green / Cycle	0.52	0.52	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.16	0.47	0.22	0.12
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	929	829	1015	1452
d1, Uniform Delay [s]	6.33	10.05	15.18	13.55
k, delay calibration	0.11	0.24	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.18	8.15	1.21	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.90	0.76	0.43
d, Delay for Lane Group [s/veh]	6.51	18.19	16.39	13.75
Lane Group LOS	A	B	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	1.15	6.51	3.29	1.53
50th-Percentile Queue Length [ft]	28.82	162.66	82.27	38.27
95th-Percentile Queue Length [veh]	2.08	10.69	5.92	2.76
95th-Percentile Queue Length [ft]	51.88	267.24	148.09	68.89

Movement, Approach, & Intersection Results

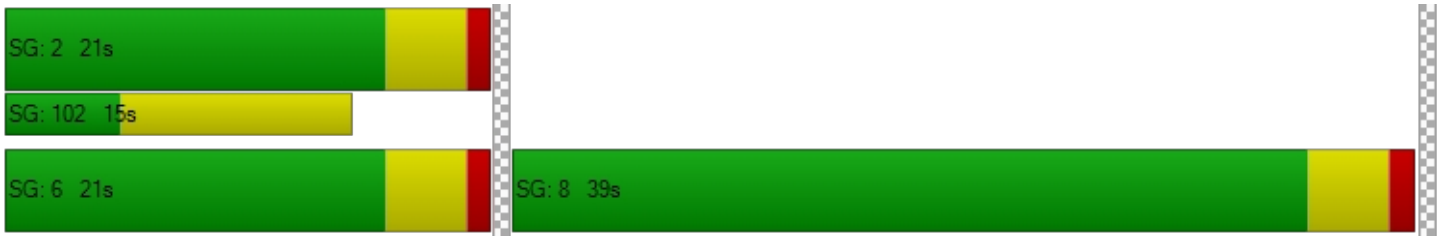
d_M, Delay for Movement [s/veh]	6.51	18.19	0.00	16.39	13.75	0.00
Movement LOS	A	B		B	B	
d_A, Approach Delay [s/veh]	14.99		16.39		13.75	
Approach LOS	B		B		B	
d_I, Intersection Delay [s/veh]	15.11					
Intersection LOS	B					
Intersection V/C	0.830					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.198	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.769	4.476
Bicycle LOS	D	E	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	60.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.106

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	80	111	375	96	781	327
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	80	111	375	96	781	327
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	28	94	24	195	82
Total Analysis Volume [veh/h]	80	111	375	96	781	327
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	457	502	455	485	554	556
Degree of Utilization, x	0.18	0.22	0.82	0.20	1.11	1.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.84	7.88	0.73	18.09	14.29
95th-Percentile Queue Length [ft]	15.71	20.98	197.01	18.23	452.33	357.34
Approach Delay [s/veh]	12.05		32.86		80.12	
Approach LOS	B		D		F	
Intersection Delay [s/veh]	60.20					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.734

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	692	605	415	194	612	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	692	605	415	194	612	225
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	173	151	104	49	153	56
Total Analysis Volume [veh/h]	692	605	415	194	612	225
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	18	38	20	0	22	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	53	53	53	53	53	53
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	14	28	10	10	16	16
g / C, Green / Cycle	0.26	0.53	0.18	0.18	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.20	0.17	0.12	0.12	0.24	0.25
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1671
c, Capacity [veh/h]	907	1872	638	285	545	511
d1, Uniform Delay [s]	18.19	7.25	20.40	20.52	16.92	17.09
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.36	0.10	1.13	2.86	2.47	3.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.32	0.65	0.68	0.78	0.81
d, Delay for Lane Group [s/veh]	19.55	7.35	21.52	23.38	19.39	20.13
Lane Group LOS	B	A	C	C	B	C
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh]	3.65	1.54	2.28	2.28	4.51	4.48
50th-Percentile Queue Length [ft]	91.31	38.41	56.97	56.91	112.67	111.89
95th-Percentile Queue Length [veh]	6.57	2.77	4.10	4.10	7.99	7.95
95th-Percentile Queue Length [ft]	164.35	69.14	102.55	102.43	199.71	198.63

Movement, Approach, & Intersection Results

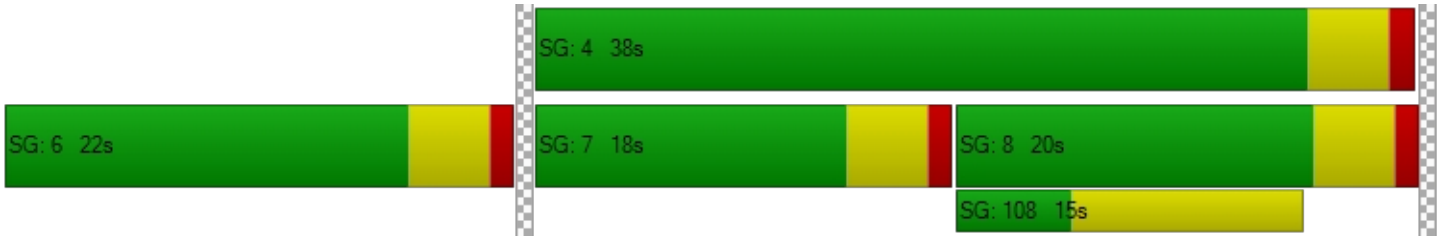
d_M, Delay for Movement [s/veh]	19.55	7.35	21.52	23.38	19.62	20.13
Movement LOS	B	A	C	C	B	C
d_A, Approach Delay [s/veh]	13.86		22.11		19.75	
Approach LOS	B		C		B	
d_I, Intersection Delay [s/veh]	17.49					
Intersection LOS	B					
Intersection V/C	0.734					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.532
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	5.202	4.635	5.513
Bicycle LOS	F	E	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.618

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	281	269	284	331	500	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	281	269	284	331	500	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	70	67	71	83	125	22
Total Analysis Volume [veh/h]	281	269	284	331	500	89
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	14	37	23	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	9	9	5	19	9	9
g / C, Green / Cycle	0.25	0.25	0.15	0.51	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.17	0.08	0.09	0.16	0.17
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1775
c, Capacity [veh/h]	440	393	503	1816	455	432
d1, Uniform Delay [s]	12.48	12.65	14.76	4.91	12.61	12.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.54	2.11	1.00	0.05	1.55	1.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.64	0.68	0.56	0.18	0.65	0.68
d, Delay for Lane Group [s/veh]	14.02	14.77	15.75	4.96	14.16	14.63
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.81	1.80	0.98	0.40	1.90	1.95
50th-Percentile Queue Length [ft]	45.15	45.01	24.53	10.10	47.62	48.85
95th-Percentile Queue Length [veh]	3.25	3.24	1.77	0.73	3.43	3.52
95th-Percentile Queue Length [ft]	81.27	81.02	44.15	18.18	85.71	87.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.02	14.77	15.75	4.96	14.35	14.63
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	14.39		9.94		14.40	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.83					
Intersection LOS	B					
Intersection V/C	0.618					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.337	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	4.640	4.618
Bicycle LOS	D	E	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Main Street & I-405 NB Off-Ramp

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.789

Intersection Setup

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Main Street			Main Street			I-405 NB Off-Ramp			I-405 NB Off-Ramp		
Base Volume Input [veh/h]	21	742	0	0	1361	93	0	0	0	102	122	279
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	742	0	0	1361	93	0	0	0	102	122	279
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	186	0	0	340	23	0	0	0	26	31	70
Total Analysis Volume [veh/h]	21	742	0	0	1361	93	0	0	0	102	122	279
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	10	42	0	0	32	0	0	0	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		C	C
C, Cycle Length [s]	51	51	51	51		51	51
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	1	29	23	23		12	12
g / C, Green / Cycle	0.03	0.58	0.46	0.46		0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.01	0.21	0.39	0.40		0.12	0.19
s, saturation flow rate [veh/h]	1781	3560	1870	1829		1828	1446
c, Capacity [veh/h]	46	2054	865	846		450	356
d1, Uniform Delay [s]	24.40	5.74	12.00	12.17		16.46	17.89
k, delay calibration	0.11	0.11	0.19	0.20		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.06	0.11	3.99	4.90		0.86	3.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.36	0.84	0.86		0.50	0.78
d, Delay for Lane Group [s/veh]	31.46	5.85	15.99	17.07		17.31	21.72
Lane Group LOS	C	A	B	B		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh]	0.32	1.47	6.52	6.80		2.08	3.05
50th-Percentile Queue Length [ft]	7.99	36.72	163.07	169.90		51.98	76.22
95th-Percentile Queue Length [veh]	0.58	2.64	10.71	11.07		3.74	5.49
95th-Percentile Queue Length [ft]	14.38	66.10	267.78	276.78		93.56	137.20

Movement, Approach, & Intersection Results

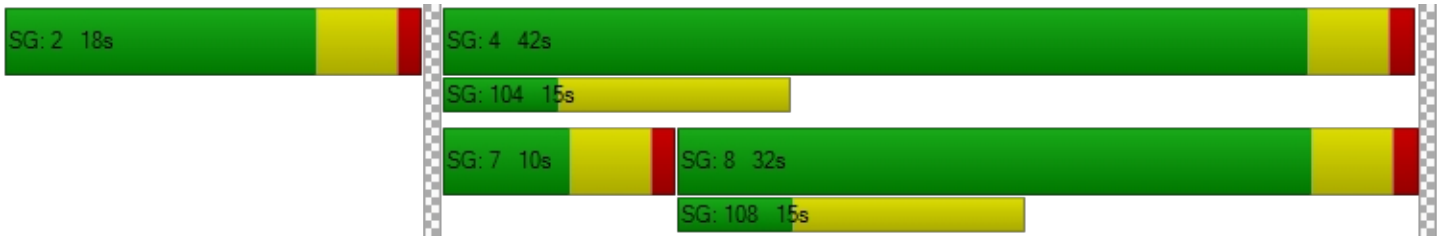
d_M, Delay for Movement [s/veh]	31.46	5.85	0.00	0.00	16.49	17.07	0.00	0.00	0.00	17.31	17.31	21.72
Movement LOS	C	A			B	B				B	B	C
d_A, Approach Delay [s/veh]	6.55			16.53			0.00			19.76		
Approach LOS	A			B			A			B		
d_I, Intersection Delay [s/veh]	14.33											
Intersection LOS	B											
Intersection V/C	0.789											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.811	1.941
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1250	917	0	450
d_b, Bicycle Delay [s]	4.22	8.80	30.00	18.02
l_b,int, Bicycle LOS Score for Intersection	2.189	2.759	4.132	1.975
Bicycle LOS	B	C	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Main Street & I-405 SB On Ramp

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.774

Intersection Setup

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Main Street			Main Street			I-405 SB On Ramp			I-405 SB On Ramp		
Base Volume Input [veh/h]	0	706	150	318	1145	0	62	279	42	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	706	150	318	1145	0	62	279	42	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	177	38	80	286	0	16	70	11	0	0	0
Total Analysis Volume [veh/h]	0	706	150	318	1145	0	62	279	42	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	4	0	3	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	0	5	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.5	0.0	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	20	0	20	40	0	0	20	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	L	C	
C, Cycle Length [s]	52	52	52	52	52	52	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	16	16	12	32	12	12	
g / C, Green / Cycle	0.30	0.30	0.22	0.61	0.22	0.22	
(v / s)_i Volume / Saturation Flow Rate	0.23	0.24	0.18	0.32	0.03	0.18	
s, saturation flow rate [veh/h]	1870	1761	1781	3560	1781	1828	
c, Capacity [veh/h]	565	532	392	2166	393	403	
d1, Uniform Delay [s]	16.59	16.90	19.45	5.95	16.55	19.37	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.10	2.90	4.05	0.20	0.19	3.62	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.76	0.80	0.81	0.53	0.16	0.80	
d, Delay for Lane Group [s/veh]	18.70	19.80	23.50	6.15	16.73	23.00	
Lane Group LOS	B	B	C	A	B	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh]	4.37	4.55	3.72	2.45	0.56	3.71	
50th-Percentile Queue Length [ft]	109.33	113.69	93.09	61.16	14.12	92.65	
95th-Percentile Queue Length [veh]	7.80	8.04	6.70	4.40	1.02	6.67	
95th-Percentile Queue Length [ft]	195.08	201.12	167.56	110.09	25.41	166.78	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	19.13	19.80	23.50	6.15	0.00	16.73	23.00	23.00	0.00	0.00	0.00
Movement LOS		B	B	C	A		B	C	C			
d_A, Approach Delay [s/veh]	19.25			9.92			21.98			0.00		
Approach LOS	B			A			C			A		
d_I, Intersection Delay [s/veh]	14.59											
Intersection LOS	B											
Intersection V/C	0.774											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.610	0.000	1.882	2.132
Crosswalk LOS	B	F	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	517	1183	517	0
d_b, Bicycle Delay [s]	16.50	5.00	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.266	2.767	2.192	4.132
Bicycle LOS	B	C	B	D

Sequence

Ring 1	-	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Avalon Boulevard & SR-91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.530

Intersection Setup

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Avalon Boulevard		Avalon Boulevard		SR-91 WB Ramps	
Base Volume Input [veh/h]	1272	245	165	1175	425	453
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1272	245	165	1175	425	453
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	318	61	41	294	106	113
Total Analysis Volume [veh/h]	1272	245	165	1175	425	453
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	4	0	0	8	2	0
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	Lead	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	28	0	0	28	32	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R
C, Cycle Length [s]	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	22	22	22	22	11	11	11
g / C, Green / Cycle	0.52	0.52	0.52	0.52	0.27	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.25	0.15	0.20	0.23	0.17	0.18	0.18
s, saturation flow rate [veh/h]	5094	1589	845	5094	1781	1667	1589
c, Capacity [veh/h]	2655	828	440	2655	476	446	425
d1, Uniform Delay [s]	6.50	5.77	12.22	6.34	13.73	13.85	13.93
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.20	0.53	0.12	1.37	1.64	1.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.30	0.38	0.44	0.63	0.66	0.67
d, Delay for Lane Group [s/veh]	6.64	5.97	12.75	6.46	15.10	15.49	15.81
Lane Group LOS	A	A	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	1.59	0.84	0.56	1.43	2.26	2.25	2.24
50th-Percentile Queue Length [ft]	39.68	21.05	13.94	35.72	56.41	56.14	55.98
95th-Percentile Queue Length [veh]	2.86	1.52	1.00	2.57	4.06	4.04	4.03
95th-Percentile Queue Length [ft]	71.42	37.88	25.10	64.29	101.54	101.05	100.77

Movement, Approach, & Intersection Results

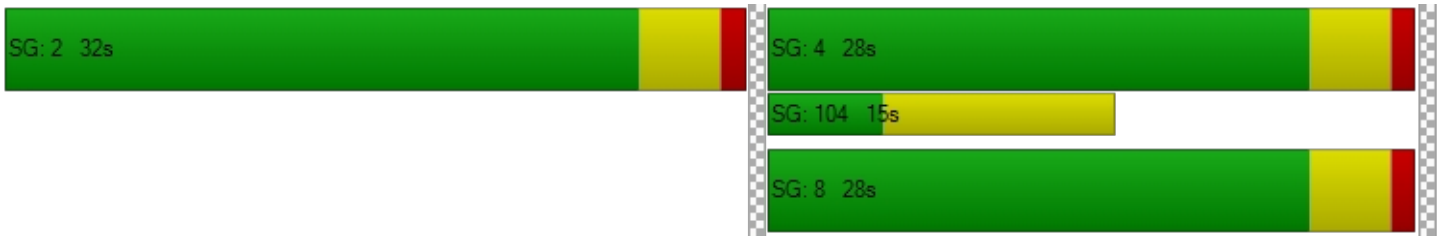
d_M, Delay for Movement [s/veh]	6.64	5.97	12.75	6.46	15.22	15.69
Movement LOS	A	A	B	A	B	B
d_A, Approach Delay [s/veh]	6.53		7.23		15.46	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	8.88					
Intersection LOS	A					
Intersection V/C	0.530					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.766
Crosswalk LOS	F	F	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.967	4.869	5.581
Bicycle LOS	E	E	F

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 15: Avalon Boulevard & I-405 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No						No	
Crosswalk		No			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 NB Ramps			I-405 NB Ramps		
Base Volume Input [veh/h]	348	1210	0	0	1529	539	0	0	0	186	2	517
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	348	1210	0	0	1529	539	0	0	0	186	2	517
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	303	0	0	382	135	0	0	0	47	1	129
Total Analysis Volume [veh/h]	348	1210	0	0	1529	539	0	0	0	186	2	517
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal group	7	4	0	0	8	0	0	0	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	15	50	0	0	35	0	0	0	0	0	10	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	10	0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C
C, Cycle Length [s]	45	45	45		45	45
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	7	32	20		5	5
g / C, Green / Cycle	0.16	0.70	0.44		0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.10	0.34	0.30		0.05	0.05
s, saturation flow rate [veh/h]	3459	3560	5094		1781	1783
c, Capacity [veh/h]	549	2499	2262		178	179
d1, Uniform Delay [s]	17.88	3.06	10.04		19.43	19.43
k, delay calibration	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	1.21	0.15	0.36		2.40	2.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.48	0.68		0.53	0.53
d, Delay for Lane Group [s/veh]	19.10	3.21	10.40		21.83	21.82
Lane Group LOS	B	A	B		C	C
Critical Lane Group	Yes	No	Yes		Yes	No
50th-Percentile Queue Length [veh]	1.59	0.86	3.08		0.96	0.96
50th-Percentile Queue Length [ft]	39.66	21.39	77.01		23.95	23.96
95th-Percentile Queue Length [veh]	2.86	1.54	5.54		1.72	1.73
95th-Percentile Queue Length [ft]	71.39	38.50	138.62		43.11	43.13

Movement, Approach, & Intersection Results

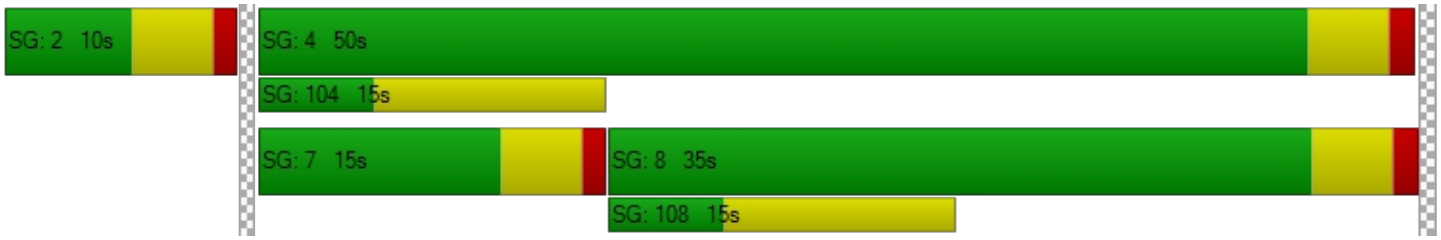
d_M, Delay for Movement [s/veh]	19.10	3.21	0.00	0.00	10.40	0.00	0.00	0.00	0.00	21.83	21.82	0.00
Movement LOS	B	A			B					C	C	
d_A, Approach Delay [s/veh]	6.76			10.40			0.00			21.83		
Approach LOS	A			B			A			C		
d_I, Intersection Delay [s/veh]	9.32											
Intersection LOS	A											
Intersection V/C	0.617											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	1.866	1.982
Crosswalk LOS	F	F	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1517	1017	0	183
d_b, Bicycle Delay [s]	1.75	7.25	30.00	24.75
l_b,int, Bicycle LOS Score for Intersection	2.845	2.401	4.132	1.870
Bicycle LOS	C	B	D	A

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 16: Avalon Boulevard & I-405 SB Ramps

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No			No			No				
Crosswalk		Yes			No			Yes			Yes	

Volumes

Name	Avalon Boulevard			Avalon Boulevard			I-405 SB Ramps			I-405 SB Ramps		
Base Volume Input [veh/h]	53	1172	186	0	1183	537	350	226	457	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	1172	186	0	1183	537	350	226	457	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	293	47	0	296	134	88	57	114	0	0	0
Total Analysis Volume [veh/h]	53	1172	186	0	1183	537	350	226	457	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal group	7	4	0	0	8	0	0	6	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	0	5	0	0	5	0	0	0	0
Maximum Green [s]	30	30	0	0	30	0	0	30	0	0	0	0
Amber [s]	3.5	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	10	40	0	0	30	0	0	20	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	0	0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Minimum Recall	No	No			No			No				
Maximum Recall	No	No			No			No				
Pedestrian Recall	No	No			No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	C	
C, Cycle Length [s]	41	41	41	41	41	41	
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50	
g_i, Effective Green Time [s]	2	24	24	18	7	7	
g / C, Green / Cycle	0.06	0.60	0.60	0.43	0.18	0.18	
(v / s)_i Volume / Saturation Flow Rate	0.03	0.37	0.37	0.33	0.10	0.06	
s, saturation flow rate [veh/h]	1781	1870	1782	3560	3459	3560	
c, Capacity [veh/h]	100	1123	1071	1546	618	636	
d1, Uniform Delay [s]	18.73	5.16	5.19	9.78	15.32	14.70	
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	4.27	0.55	0.60	0.81	0.82	0.34	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.53	0.62	0.62	0.77	0.57	0.36	
d, Delay for Lane Group [s/veh]	23.00	5.72	5.79	10.60	16.13	15.03	
Lane Group LOS	C	A	A	B	B	B	
Critical Lane Group	No	No	Yes	No	Yes	No	
50th-Percentile Queue Length [veh]	0.54	1.97	1.91	3.29	1.32	0.80	
50th-Percentile Queue Length [ft]	13.60	49.16	47.82	82.21	32.90	20.05	
95th-Percentile Queue Length [veh]	0.98	3.54	3.44	5.92	2.37	1.44	
95th-Percentile Queue Length [ft]	24.48	88.48	86.07	147.98	59.23	36.08	

Movement, Approach, & Intersection Results

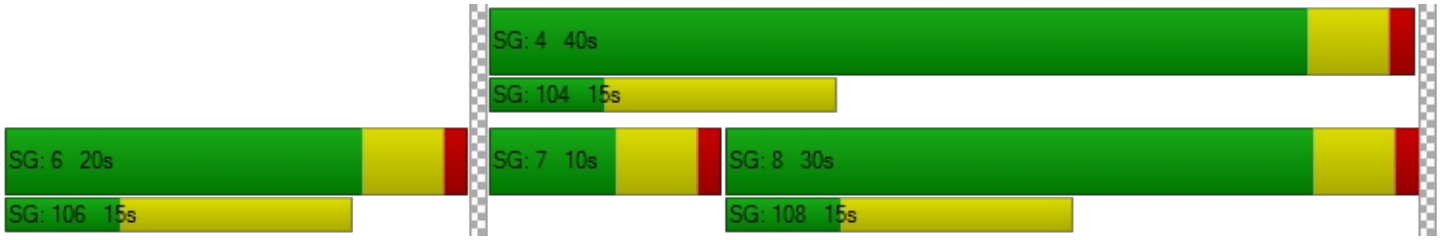
d_M, Delay for Movement [s/veh]	23.00	5.75	5.79	0.00	10.60	0.00	16.13	15.03	0.00	0.00	0.00	0.00
Movement LOS	C	A	A		B		B	B				
d_A, Approach Delay [s/veh]	6.40			10.60			15.70			0.00		
Approach LOS	A			B			B			A		
d_I, Intersection Delay [s/veh]	9.66											
Intersection LOS	A											
Intersection V/C	0.674											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	21.68	21.68
l_p,int, Pedestrian LOS Score for Intersection	2.786	0.000	2.536	1.896
Crosswalk LOS	C	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1183	850	517	0
d_b, Bicycle Delay [s]	5.00	9.92	16.50	30.00
l_b,int, Bicycle LOS Score for Intersection	2.724	2.536	2.035	4.132
Bicycle LOS	B	B	B	D

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 17: Main Street & SR 91 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.698

Intersection Setup

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			No			Yes		

Volumes

Name	Main Street			Main Street			SR-91 WB Ramps			SR-91 WB Ramps		
Base Volume Input [veh/h]	1	644	158	109	802	0	0	0	0	259	0	329
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	644	158	109	802	0	0	0	0	259	0	329
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	161	40	27	201	0	0	0	0	65	0	82
Total Analysis Volume [veh/h]	1	644	158	109	802	0	0	0	0	259	0	329
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	7	4	0	3	8	0	0	0	0	2	0	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	30	30	0	0	0	0	30	0	0
Amber [s]	3.5	3.5	0.0	3.5	3.5	0.0	0.0	0.0	0.0	3.5	0.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	10	25	0	11	26	0	0	0	0	24	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	5	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	10	0	0
Rest In Walk		No			No					No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	0.0	2.5	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Minimum Recall	No	No		No	No					No		
Maximum Recall	No	No		No	No					No		
Pedestrian Recall	No	No		No	No					No		
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C		L	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50		4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50		2.50	2.50
g_i, Effective Green Time [s]	0	12	12	4	16		11	11
g / C, Green / Cycle	0.00	0.30	0.30	0.09	0.39		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.22	0.22	0.06	0.23		0.15	0.21
s, saturation flow rate [veh/h]	1781	1870	1744	1781	3560		1781	1589
c, Capacity [veh/h]	3	561	524	157	1377		495	442
d1, Uniform Delay [s]	20.16	12.72	12.73	17.90	9.81		12.34	13.30
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	70.34	1.93	2.08	5.42	0.39		0.86	2.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.74	0.74	0.69	0.58		0.52	0.75
d, Delay for Lane Group [s/veh]	90.51	14.65	14.81	23.32	10.20		13.20	15.82
Lane Group LOS	F	B	B	C	B		B	B
Critical Lane Group	No	No	Yes	Yes	No		No	Yes
50th-Percentile Queue Length [veh]	0.06	2.94	2.77	1.09	2.14		1.70	2.47
50th-Percentile Queue Length [ft]	1.51	73.49	69.27	27.17	53.47		42.40	61.72
95th-Percentile Queue Length [veh]	0.11	5.29	4.99	1.96	3.85		3.05	4.44
95th-Percentile Queue Length [ft]	2.71	132.28	124.68	48.91	96.24		76.33	111.10

Movement, Approach, & Intersection Results

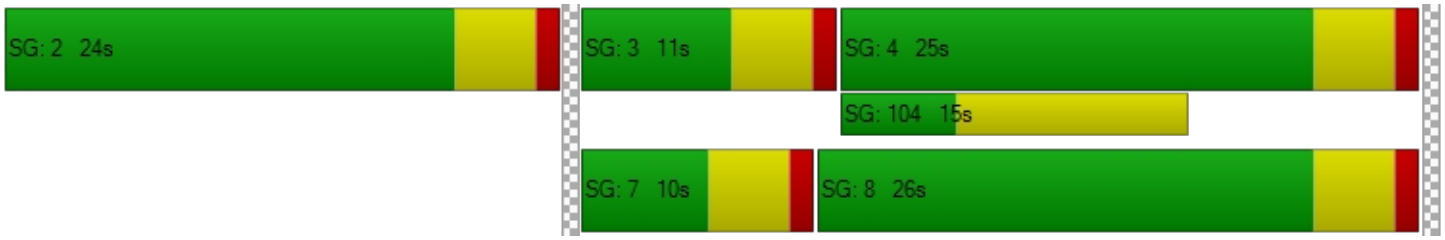
d_M, Delay for Movement [s/veh]	90.51	14.70	14.81	23.32	10.20	0.00	0.00	0.00	0.00	13.20	0.00	15.82
Movement LOS	F	B	B	C	B					B		B
d_A, Approach Delay [s/veh]	14.82			11.77			0.00			14.66		
Approach LOS	B			B			A			B		
d_I, Intersection Delay [s/veh]	13.57											
Intersection LOS	B											
Intersection V/C	0.698											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.199
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	717	0	0
d_b, Bicycle Delay [s]	13.00	12.35	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	2.222	2.311	4.132	4.132
Bicycle LOS	B	B	D	D

Sequence

Ring 1	-	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 21: I-110 NB On-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.598

Intersection Setup

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			30.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			Yes			No			No	

Volumes

Name	I-110 NB On Ramp			I-110 NB On Ramp			190th Street			190th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	459	1373	0	0	762	337
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	459	1373	0	0	762	337
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	115	343	0	0	191	84
Total Analysis Volume [veh/h]	0	0	0	0	0	0	459	1373	0	0	762	337
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	0	4	0	0	0	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	5	5	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	30	30	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	3.5	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	17	0	0	0	0	21	33	0	10	22	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	2.5	2.5	0.0
Minimum Recall		No					No	No		No	No	
Maximum Recall		No					No	No		No	No	
Pedestrian Recall		No					No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	L	C	R
C, Cycle Length [s]	31		31	31	31	31	31	31
L, Total Lost Time per Cycle [s]	4.50		4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50		2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	0		7	18	18	0	11	11
g / C, Green / Cycle	0.00		0.22	0.57	0.57	0.00	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.00		0.13	0.37	0.37	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1870		3459	1870	1870	1781	3560	1589
c, Capacity [veh/h]	0		774	1060	1060	0	1222	546
d1, Uniform Delay [s]	0.00		10.84	4.62	4.62	0.00	8.56	8.54
k, delay calibration	0.11		0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00		0.73	0.67	0.67	0.00	0.53	1.14
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00		0.59	0.65	0.65	0.00	0.62	0.62
d, Delay for Lane Group [s/veh]	0.00		11.57	5.29	5.29	0.00	9.09	9.68
Lane Group LOS	A		B	A	A	A	A	A
Critical Lane Group	No		No	Yes	No	No	No	No
50th-Percentile Queue Length [veh]	0.00		1.09	1.14	1.14	0.00	1.45	1.37
50th-Percentile Queue Length [ft]	0.00		27.29	28.47	28.47	0.00	36.13	34.24
95th-Percentile Queue Length [veh]	0.00		1.97	2.05	2.05	0.00	2.60	2.47
95th-Percentile Queue Length [ft]	0.00		49.13	51.25	51.25	0.00	65.04	61.64

Movement, Approach, & Intersection Results

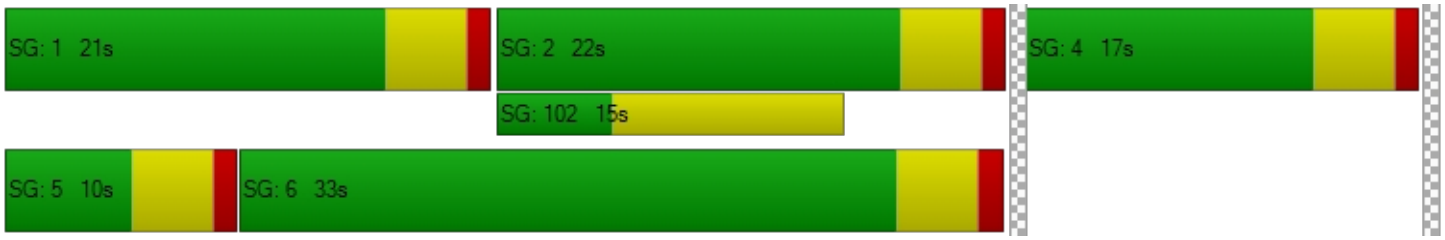
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	11.57	5.29	5.29	0.00	9.09	9.68
Movement LOS	A	A	A				B	A	A	A	A	A
d_A, Approach Delay [s/veh]	0.00			0.00			6.87			9.27		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.77											
Intersection LOS	A											
Intersection V/C	0.598											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	2.084	0.000	0.000
Crosswalk LOS	F	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	417	0	950	583
d_b, Bicycle Delay [s]	18.80	30.00	8.27	15.05
I_b,int, Bicycle LOS Score for Intersection	1.560	4.132	3.071	2.466
Bicycle LOS	A	D	C	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 22: I-110 SB Off-Ramp & 190th Street

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.824

Intersection Setup

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	I-110 SB Off-Ramp		190th Street		190th Street	
Base Volume Input [veh/h]	397	471	0	1443	756	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	397	471	0	1443	756	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	118	0	361	189	0
Total Analysis Volume [veh/h]	397	471	0	1443	756	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	8	0	0	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	5	5	0
Maximum Green [s]	30	0	0	30	30	0
Amber [s]	3.5	0.0	0.0	3.5	3.5	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	26	0	0	34	34	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	0.0	2.5	2.5	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	54	54	54	54
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	19	19	26	26
g / C, Green / Cycle	0.35	0.35	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.22	0.30	0.41	0.15
s, saturation flow rate [veh/h]	1781	1589	3560	5094
c, Capacity [veh/h]	629	561	1708	2443
d1, Uniform Delay [s]	14.50	16.01	12.26	8.56
k, delay calibration	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.05	3.44	1.22	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.84	0.84	0.31
d, Delay for Lane Group [s/veh]	15.55	19.45	13.48	8.63
Lane Group LOS	B	B	B	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh]	3.64	5.07	6.21	1.46
50th-Percentile Queue Length [ft]	91.03	126.68	155.17	36.49
95th-Percentile Queue Length [veh]	6.55	8.76	10.29	2.63
95th-Percentile Queue Length [ft]	163.86	218.97	257.32	65.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	15.55	19.45	0.00	13.48	8.63	0.00
Movement LOS	B	B		B	A	
d_A, Approach Delay [s/veh]	17.67		13.48		8.63	
Approach LOS	B		B		A	
d_I, Intersection Delay [s/veh]	13.47					
Intersection LOS	B					
Intersection V/C	0.824					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.119	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
I_b,int, Bicycle LOS Score for Intersection	4.132	5.323	4.548
Bicycle LOS	D	F	E

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 25: Hamilton Avenue & I-110 SB Ramps

Control Type:	All-way stop	Delay (sec / veh):	136.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.629

Intersection Setup

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hamilton Avenue		Hamilton Avenue		I-110 SB Ramps	
Base Volume Input [veh/h]	62	539	739	171	334	261
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	539	739	171	334	261
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	135	185	43	84	65
Total Analysis Volume [veh/h]	62	539	739	171	334	261
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	474	539	739	484	439	503
Degree of Utilization, x	0.13	1.03	1.63	0.35	0.68	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	15.33	42.23	1.57	4.93	3.79
95th-Percentile Queue Length [ft]	11.20	383.35	1055.76	39.37	123.31	94.64
Approach Delay [s/veh]	67.67		256.78		23.08	
Approach LOS	F		F		C	
Intersection Delay [s/veh]	136.79					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 27: Figueroa Street & I-110 NB Ramps

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.734

Intersection Setup

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		No		Yes	

Volumes

Name	Figueroa Street		Figueroa Street		I-110 NB Ramps	
Base Volume Input [veh/h]	508	424	897	303	464	139
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	508	424	897	303	464	139
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	127	106	224	76	116	35
Total Analysis Volume [veh/h]	508	424	897	303	464	139
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal group	7	4	8	0	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.5	3.5	3.5	0.0	3.5	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	16	41	25	0	19	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	10	10	0	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.5	2.5	0.0	2.5	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R	L	C
C, Cycle Length [s]	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	11	33	18	18	12	12
g / C, Green / Cycle	0.20	0.61	0.33	0.33	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.15	0.12	0.25	0.19	0.17	0.17
s, saturation flow rate [veh/h]	3459	3560	3560	1589	1781	1685
c, Capacity [veh/h]	697	2168	1158	517	405	383
d1, Uniform Delay [s]	20.52	4.77	16.71	15.45	19.84	19.86
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.48	0.04	1.14	1.06	3.03	3.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.20	0.77	0.59	0.76	0.77
d, Delay for Lane Group [s/veh]	22.00	4.81	17.85	16.51	22.87	23.09
Lane Group LOS	C	A	B	B	C	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.90	0.75	4.62	2.92	3.67	3.50
50th-Percentile Queue Length [ft]	72.62	18.83	115.38	72.98	91.68	87.56
95th-Percentile Queue Length [veh]	5.23	1.36	8.14	5.25	6.60	6.30
95th-Percentile Queue Length [ft]	130.72	33.89	203.47	131.37	165.02	157.61

Movement, Approach, & Intersection Results

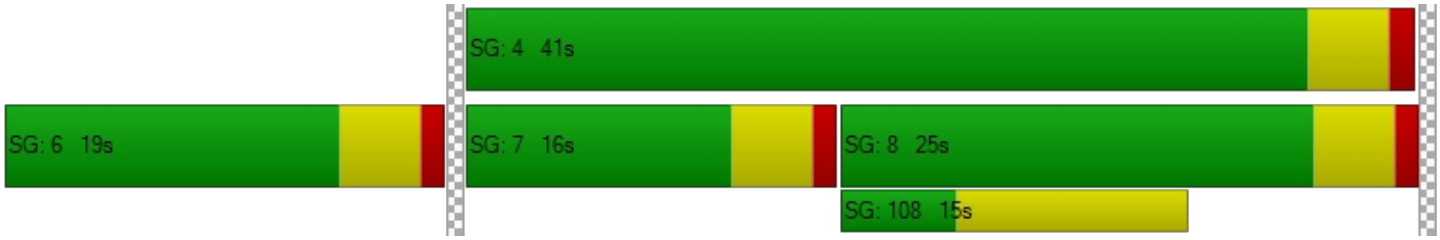
d_M, Delay for Movement [s/veh]	22.00	4.81	17.85	16.51	22.94	23.09
Movement LOS	C	A	B	B	C	C
d_A, Approach Delay [s/veh]	14.18		17.51		22.98	
Approach LOS	B		B		C	
d_I, Intersection Delay [s/veh]	17.58					
Intersection LOS	B					
Intersection V/C	0.734					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.68
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.456
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.901	5.122	5.127
Bicycle LOS	E	F	F

Sequence

Ring 1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 28: SR 91 EB Ramps & Albertoni Street

Control Type:	Signalized	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.698

Intersection Setup

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR 91 EB Ramps		Albertoni Street		Albertoni Street	
Base Volume Input [veh/h]	430	366	231	823	356	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	430	366	231	823	356	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	92	58	206	89	16
Total Analysis Volume [veh/h]	430	366	231	823	356	63
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Permissive	Permissive
Signal group	8	0	1	6	2	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	5	5	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.5	0.0	3.5	3.5	3.5	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	29	0	11	31	20	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	0.0	2.5	2.5	2.5	0.0
Minimum Recall	No		No	No	No	
Maximum Recall	No		No	No	No	
Pedestrian Recall	No		No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	L	C	C	C
C, Cycle Length [s]	37	37	37	37	37	37
L, Total Lost Time per Cycle [s]	4.50	4.50	4.50	4.50	4.50	4.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.50	2.50	2.50	2.50	2.50
g_i, Effective Green Time [s]	12	12	5	16	7	7
g / C, Green / Cycle	0.33	0.33	0.12	0.43	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.24	0.23	0.07	0.23	0.11	0.12
s, saturation flow rate [veh/h]	1781	1589	3459	3560	1870	1776
c, Capacity [veh/h]	585	522	426	1534	350	332
d1, Uniform Delay [s]	11.11	10.95	15.39	7.87	13.89	13.99
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.82	1.73	1.08	0.29	1.64	1.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.74	0.70	0.54	0.54	0.60	0.63
d, Delay for Lane Group [s/veh]	12.93	12.68	16.47	8.16	15.53	15.96
Lane Group LOS	B	B	B	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No
50th-Percentile Queue Length [veh]	2.60	2.18	0.83	1.67	1.46	1.49
50th-Percentile Queue Length [ft]	65.01	54.59	20.72	41.71	36.55	37.33
95th-Percentile Queue Length [veh]	4.68	3.93	1.49	3.00	2.63	2.69
95th-Percentile Queue Length [ft]	117.02	98.26	37.29	75.08	65.79	67.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.93	12.68	16.47	8.16	15.71	15.96
Movement LOS	B	B	B	A	B	B
d_A, Approach Delay [s/veh]	12.82		9.98		15.74	
Approach LOS	B		A		B	
d_I, Intersection Delay [s/veh]	12.04					
Intersection LOS	B					
Intersection V/C	0.698					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	2.377	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	30.00	30.00	30.00
l_b,int, Bicycle LOS Score for Intersection	4.132	5.002	4.478
Bicycle LOS	D	F	E

Sequence

Ring 1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX L

Utility Report

UTILITY REPORT

for

Carol Kimmelman Athletic and Academic Campus
Carson, California

Prepared For:

The Carol Kimmelman Center, LLC.
2121 East 7th Place
Los Angeles, CA 90021

Prepared By:

Langan Engineering and Environmental Services, Inc.
515 South Flower Street, Suite 2860
Los Angeles, California 90071

12 April 2019
Langan Project No. 700060401

LANGAN

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1.0 INTRODUCTION

The purpose of this report is to inform the utility evaluations of the Environmental Impact Report for the Carol Kimmelman Athletic & Academic Campus project (the "Project"). This report identifies the potential wastewater and water impacts that may be associated with the development of the Project. The report provides technical information and responds to the relevant thresholds of significance listed in Appendix G of the California Environmental Quality Act ("CEQA") Guidelines relating to wastewater and water.

2.0 PROJECT DESCRIPTION

2.1 Site Description

The Project site includes approximately 87 acres (Site) of the northeastern portion of the existing approximately 187 acre Victoria Golf Course. The County of Los Angeles (County) owns the Site which the County currently leases for the operation of a golf course. Prior to the Victoria Golf Course's current use as a County golf course, it was the site of a portion of the former Ben K. Kazarian (BKK) landfill, which operated as a Class II municipal solid waste landfill from 1948 to 1959. The California Department of Toxic Substances Control (DTSC) is overseeing the former landfill's remediation. The entire former landfill site is divided into Operable Units (OU) focused on two separate remediation operations, of which the Victoria Golf Course site is OU-2. Refer to Figure 1 for the Site location.

The Site contains existing infrastructure within and adjacent to its boundaries including water, wastewater, stormwater drainage, electric, gas and telecommunications. The County owns and operates the facility which includes wastewater and stormwater drainage. Domestic water is operated and maintained by California Water Service Company (CWSC). Recycled water is operated and maintained by West Basin Municipal Water District (WBMWD). Dry utility providers and infrastructure owners with facilities near the Site include Southern California Gas, Southern California Edison, and AT&T.

2.2 Proposed Development

The Project involves the redevelopment of the Site as a sports and academic campus (see Figure 2 for current concept). Project components would include a learning center, tennis center, soccer center, and various support buildings. Features of the Project include:

<u>Tennis Center</u>

- The tennis center component would occupy approximately 28 acres developed with a 23,000 square foot welcome center, a spectator venue with up to 12 hard courts and 1,200 seats, 50 tennis courts of various sizes, a 5,000 square foot administration building, a 13,000 square foot player development building, and outdoor training spaces including a 100-meter sprint track, basketball courts, a training turf, a maintenance facility, and vehicle/ bus parking.

Learning Center

- Adjacent to the tennis center would be an approximately 25,000 square foot learning center that would include classrooms, quiet rooms, staff support for homework, counseling, and tutoring.
- The welcome center and learning center will be located in the main entrance area within the northwest portion of the Site.

Soccer Center

- The soccer center component would occupy approximately 58 acres developed with full-sized natural grass soccer fields, full-sized artificial turf soccer fields, and natural grass multi-purpose fields.

Other Improvements

- Additional site improvements would include asphalt paved parking lots and two additional overflow parking areas between the fields and South Avalon Boulevard.
- Miscellaneous support buildings, including maintenance facilities, restrooms, and sheds, will be constructed throughout the site.

3.0 UTILITY ASSESSMENT

3.1 Wastewater

The Project site sanitary sewer system is within Los Angeles County Sanitation District (LACSD) Number 8 sphere of influence as shown in the Sanitation Districts of Los Angeles County Boundary Map in Appendix A. There is an 8-inch diameter sanitary sewer in Martin Luther King Jr. Street, 8-inch diameter sanitary sewer in Towne Avenue and a 10-inch diameter sanitary sewer in 189th Street, which provide the existing sewer service for the Victoria golf course. As depicted on the County of Los Angeles Sanitary Sewer Atlas Maps (Appendix A), there is an existing 15-inch diameter sanitary sewer in Avalon Boulevard, and an existing 18-inch diameter sanitary sewer in Avalon Boulevard starting from East Elsmere Drive and continuing south, parallel to the said 15-inch sanitary sewer. The two parallel pipes ultimately connect to the LACSD 27-inch diameter Del Amo trunk sewer, located in Avalon Boulevard south of Del Amo Boulevard. The LACSD 27-inch diameter trunk sewer has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015. Figure 3 – Existing Water and Sewer Map shows the approximate location of the existing sewers.

The wastewater from the Site is conveyed and discharged to the Joint Water Pollution Control Plant (JWPCP), which is operated by the Los Angeles County Sanitation District (LACSD) (Appendix F). The plant occupies approximately 420 acres to the east of the Harbor (110) Freeway. Approximately 200 of the 420 acres are used as buffer areas between the operational areas and surrounding residential neighbors. The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 million gallons of wastewater per day (mgd), and has a total permitted capacity of 400 mgd. In 2017,

the plant effluent was approximately 257 mgd. The plant serves a population of approximately 3.5 million people throughout Los Angeles County. Prior to discharge, the treated wastewater is disinfected with sodium hypochlorite and sent to the Pacific Ocean through a network of outfalls. These outfalls extend 1-½ miles off the Palos Verdes Peninsula to a depth of about 200 feet.

The Site is served by on-site, gravity flow sanitary sewers. All on-site wastewater flows from the private sanitary sewers ultimately discharge into the County owned sanitary sewers described above. Per the LACSD Sanitary Sewer Discharge Table of Appendix E, the total existing estimated wastewater flow from the Site is 4,542 gpd as per Table 1 and the proposed estimated wastewater flow from the Project is 19,700 gpd as per Table 2 shown below.

Table 1
Existing Estimated Wastewater Flow

Land Use	Total Building Area of Project (sf)	Average Wastewater Flow (gpd)	Peak Flow (cfs)
Golf Course, Camp, & Park (100 gpd/1000 sf)	14,780	1,478	0.006
Restaurant (1000 gpd/1000 sf)	2,773	2,773	0.011
Maintenance Building (100 gpd/1000 sf)	2,905	291	0.001
Totals		4,542 gpd	0.017 cfs

1. Golf Course, Camp & Park includes 14,278 sf clubhouse and 502 sf comfort station
2. Land use area and flow per Los Angeles County Sanitation District in Appendix E
3. Peak flow based on 2.5 peaking factor

Table 2
Proposed Estimated Wastewater Flow

Land Use	Total Building Area of Project (sf)	Average Wastewater Flow (gpd)	Peak Flow (cfs)
Learning Center (200 gpd/1000 sf)	25,000	5,000	0.019
Welcome Center (200 gpd/1000 sf)	23,000	4,600	0.018
Player Development (600 gpd/1000 sf	13,000	7,800	0.030
Administrative Building (200 gpd/1000 sf)	5,000	1,000	0.003
Maintenance Building (100 gpd/1000 sf)	3,000	300	0.001
Soccer Center Support (100 gpd/1000 sf)	10,000	1,000	0.003
Totals		19,700 gpd	0.074 cfs

1. Land use area and flow per Los Angeles County Sanitation District in Appendix E
2. Peak flow based on 2.5 peaking factor

In order to accommodate the proposed Project, based on the Site Plan, new sanitary sewers would be constructed on-site as necessary. Prior to the development of new buildings, new sanitary sewers serving the buildings would be designed using the County Department of Public Works and California Plumbing Code standards. Also, the Project would implement water conservation measures that would serve to reduce the Project's demand on the wastewater system.

Sanitary sewer service for the Project would be provided utilizing one or multiple new sewer lateral connections from the Site to the existing 8-inch diameter sewer in Martin Luther King Jr. Street and the existing 15-inch diameter sewer main in Avalon Boulevard depending on the final design. The estimated average daily and peak flow increase for the Project is approximately 15,158 gpd and 0.057 cfs.

3.2 Domestic Water

Domestic and fire water service to the Site is provided by the California Water Service Company (CWSC). As depicted on the CWSC Water Atlas Maps of Appendix B, there is an existing 14-inch diameter water main in Martin Luther King Jr. Street and an existing 8-inch water main in Avalon Boulevard. There are currently two public fire hydrants along the south side of Martin Luther King Jr. Street, fronting the Project. Figure 3 – Existing Water and Sewer Map shows the approximate location of the existing water mains.

The Site is within the CWSC Dominguez District sphere of influence. Based on the 2015 Urban Water Management Plan (UWMP) provided by CWSC, the imported water is purchased from Metropolitan Water District of Southern California through the West Basin Municipal Water District. In accordance the Water Conservation Act of 2009, the Dominguez District is targeting a 20% reduction from its 10-year baseline average by 2020. As per the 2015 UWMP, the 10-15 year baseline gross water use is 33,834 ac-ft per year and 216 gallons per capita per day (gpcd). Presently, the Victoria Golf Course is consuming approximately 12,800 gpd of domestic water for the entire golf course site. Since the proposed Project is approximately 50% of the entire site, the proportional domestic water consumption for the Project site is 6,400 gpd.

Domestic water service to the Site in the future will continue to be supplied by CWSC for domestic and fire protection use. New on-site water mains and laterals will be needed to distribute water to the new proposed buildings. The domestic water improvements are anticipated to include construction and installation of 4-inch to 8-inch diameter water mains. It is anticipated that the on-site mains would connect to the existing mains in both Martin Luther King Jr. and Avalon Boulevard. All new on-site water mains will be sized to accommodate demands for the proposed uses. The design and installation of new water mains will meet applicable CWSC standards and County Code. Additional on-site fire water mains and hydrants will be constructed as necessary to comply with applicable County Code (Title 20 – Utilities) and fire requirements regarding fire flow to provide fire water service to the new buildings and the improved Site. The minimum fire flow and fire hydrant requirements would be determined by the Los Angeles County Fire Department. The computation of the available fire flow would be based upon a minimum of 20 psi residual operating pressure remaining in the street main from which the fire flow is being measured at the time of measurement of the fire flow.

Domestic water demand on-site would be designed to operate efficiently in order to facilitate the County's water usage goals. It is anticipated that the Project would incorporate high-efficiency bathroom fixtures and water heaters and use reclaimed water for landscaping to reduce water consumptions. The proposed estimated domestic water demand for the Project is 24,887 gpd per Table 3.

Table 3
Proposed Estimated Water Demand

Use	Estimated Water Demand (gpd)
Tennis and Soccer Buildings	21,917
Tennis Courts	2,970
Total	24,887 gpd

1. Tennis Buildings demand assumes waterless urinals
2. Tennis courts based on estimated usage of 500,000 gal/year for hard courts and 400 gpd/court for clay courts

The proposed estimated water demand of 24,887 gpd is greater than the existing estimated domestic water consumption of 6,400 gpd.

3.3 Recycled Water

Recycled water service to the Site is provided by the West Basin Municipal Water District (WBMWD). As depicted on the WBMWD Recycled Water Atlas Map of Appendix D, 12-inch and 24-inch diameter recycled water mains exist in Martin Luther King Jr. Street. In addition, there is an existing 30-inch recycled water main in Avalon Boulevard. Based on the 2015 Urban Water Management Plan provided by CWSC, the recycled water is produced by WBMWD in their West Basin Water Recycling Plant located in El Segundo. Figure 3 – Existing Water and Sewer Map shows the approximate location of the existing water mains.

Presently, the Victoria Golf Course is consuming approximately 218,000 gpd of recycled water for the entire golf course site. Since the proposed Project is approximately 50% of the entire site, the proportional recycled water usage is approximately 109,000 gpd.

Recycled water service to the Site in the future will continue to be supplied by the WBMWD. New on-site recycled water mains and laterals will be needed to distribute the water. The recycled water improvements are anticipate to include construction and installation of 4-inch and 6-inch diameter mains. The design and installation of the new recycled water mains would meet applicable WBMWD standards and County Department of Public Health codes and standards.

The Project would utilize recycled water for the irrigation of landscaped areas and soccer fields. Soccer fields would be both natural grass and synthetic turf and would be irrigated. The estimated amount of proposed recycled water consumption is 31,552 gpd per Table 4.

Table 4
Proposed Estimated Recycled Water Demand

Use	Estimated Water Demand (gpd)
Soccer Fields	31,552

1. Soccer field demand based on approximately 2,300,000 gal/year/field for natural turf And 3,000 gal/year/field for artificial turf

The proposed estimated recycled water total demand for the project is 31,552 gpd and is less than the existing estimated recycled water consumption of 109,000 gpd. Therefore, recycled water is available for use to meet irrigation requirements for the Project. Based on this analysis, adequate recycled water services exist in the vicinity of the Project site to provide recycled water for the Project.

4.0 ANALYSIS OF PROJECT IMPACTS

4.1 Methodology

The development characteristics of the Project, as defined in the Project Description and on the Conceptual Site Plan, were extracted to understand the Project needs. Information about the Site including location, surrounding existing utilities, and agencies that would provide services to the Site for the Project has been assessed. Wastewater assessment was determined by calculating the estimated discharge of the Project's land use using the information provided by the County of Los Angeles Sanitation District. Estimated domestic water and recycled water demand have been estimated and tabulated in Table 3 and 4 above.

4.2 CEQA Thresholds of Significance

The relevant CEQA thresholds of significant factors regarding utilities and service systems for the wastewater and water utilities are presented in Appendix G of the 2018 CEQA Statute and Guidelines. Based on the existing conditions and proposed Project, impacts would be less than significant.

- ***Would the project require or result in the relocation or construction of new or expanded water or wastewater treatment facilities, the construction of which could cause significant environmental effects?***

  No significant increase in wastewater flows from the Site is expected as a result of construction activities. The majority of the proposed sanitary sewers would be constructed within the Site, with the exception of the new lateral connections to the sanitary sewer system in the adjacent streets. Construction would be confined to trenching for the sanitary sewer line and would be temporary in nature. Vehicle and pedestrian access may be temporarily affected during the construction of the new connections requiring traffic detouring and traffic control. However, emergency access would continue to be provided.

During operation, the Project would include a learning center, tennis center, soccer center. The existing golf course and open space areas, clubhouse, maintenance area and parking would be replaced by new buildings, courts, fields, parking lots and other public areas. As discussed in more detail in our Hydrology and Water Quality Report dated 12 April 2019, the Project would be designed to comply with the requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) Municipal Regional Stormwater NPDES Permit Order R4-2018-0087 NPDES Permit No. CAG914001, the Construction General Permit Water Quality Order 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ).

Wastewater generated by the Project would be routed to and treated by the Joint Water Pollution Control Plant (JWPCP), which is owned and operated by the Los Angeles County Sanitation District (LACSD). Operational discharge flows treated at the JWPCP would be required to comply with the waste discharge requirements. Compliance with condition or permit requirements established at the JWPCP would ensure that discharges into the wastewater treatment facility system from the operation of the Project would not exceed applicable Los Angeles RWQCB wastewater treatment requirements. The LACSD 27-inch diameter Del Amo trunk sewer, located in Avalon Boulevard south of Del Amo Boulevard has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015. The estimated average daily and peak wastewater flow increase for the Project is approximately 15,158 gpd and 0.057 cfs. This is a negligible increase in both average and peak daily flow and upgrades to the existing sanitary sewers are not anticipated. The JWPCP has a total permitted capacity of 400 mgd, and in 2017 the reported plant effluent was approximately 257 mgd. The Project estimated average daily wastewater flow of 19,700 gpd would be 0.005% of the total permitted capacity. Therefore, the JWPCP has available treatment capacity and the Project would not exceed the wastewater treatment requirements.

As discussed in more detail in this report, the water and wastewater needs for the Project would not exceed the available capacity of the existing water supply, water distribution mains, wastewater conveyance systems or wastewater treatment facility. Adequate domestic water and wastewater infrastructure exist in the vicinity of the Project Site to provide domestic water for the Project. CWSC would continue to provide water service to the Project. The CWSC Will Serve Letter and the County Sanitation Districts of Los Angeles County Will Serve letter are included as Appendix C.

On-site construction of the proposed water and wastewater infrastructure would be within the Project limits. The design and construction would comply with applicable regulatory codes and standards. The expansion of the existing water or wastewater treatment facilities is not anticipated. The connection to the existing water mains and sanitary sewers would require construction activities at the locations of the existing facilities within the public streets. The existing water and sewer infrastructure is directly adjacent to the Site and would require the construction of lateral connections. No off-site extensions or upgrades to the existing water mains and sewers are anticipated. The construction of the laterals would be temporary and limited to trenching and connections in the streets adjacent to the Site.

Since facility expansion and new facility construction is not required, and the construction of new connections to the existing water and wastewater infrastructure would be minimal, the Project would not result in the construction of new treatment facilities or the expansion of existing facilities the construction of which could cause significant environmental effects.

- ***Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

  Project construction activities which require the use both domestic and recycled water include, but are not limited to: soil compaction and earthwork, dust abatement, mixing and placement of concrete, equipment and site cleanup, irrigation for plant and landscaping establishment and water line testing. Waster used during construction would be obtained from CWSC domestic and WBMWD recycled water supplies. Water consumption during Project construction would be temporary in nature, would not exceed the net new water consumption and would not create a significant increase in domestic or fire water consumption and would not be expected to have an adverse impact on available supplies and infrastructure. The majority of the proposed new water mains would be constructed within the Site, with the exception of the new lateral connections to the existing water mains in Martin Luther King Jr. Street and Avalon Boulevard. Construction would be confined to trenching for the mains and would be temporary in nature. Vehicle and pedestrian access may be temporarily affected during the construction of the new connections requiring traffic detouring and traffic control. However, emergency access would continue to be provided.

  The Project has sufficient water supply for the proposed domestic consumption and recycled water usage. The proposed estimated domestic water demand for the Project is 24,887 gpd, which is greater than the existing estimated domestic water consumption of 6,400 gpd. The proposed estimated recycled water total demand for the Project is 31,552 gpd, which is less than the existing estimated recycled water consumption of 109,000 gpd.

  The CWSC Ranch Dominguez District Will Serve Letter indicates that water would be provided to the Project. Therefore, the project has sufficient water supplies to serve the project.

- ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

  The estimated average daily and peak wastewater flow increase for the Project is approximately 15,158 gpd and 0.057 cfs. This is a negligible increase in both average and peak daily flow and upgrades to the existing sanitary sewers are not anticipated. The JWPCP has a total permitted capacity of 400 mgd, and in 2017 the reported plant effluent was approximately 257 mgd. The Project estimated average daily wastewater flow of

19,700 gpd would be 0.005% of the total permitted capacity. Therefore, the Joint Water Pollution Control Plant has adequate capacity to serve the Project's projected demand.

5.0 CUMULATIVE IMPACTS

Development of the proposed Project in conjunction with the related projects would result in an increase in the demand for sanitary sewer service area in the service area. Forecasted growth from the related projects in the area serving the Site could generate up to approximately 372,470 gpd of wastewater. Combined with the Project, this equates to an increase of approximately 16% of the peak flow of 2.4 mgd in the Del Amo trunk sewer (last measured by LACSD in 2015). With respect to the JWPCP, this equates to an increase of approximately 0.15% of the estimated average daily wastewater flow.

The Project and related projects would result in the increased consumption of water in the area. Forecasted growth from the related projects in the area serving the Site could generate up to approximately 225,000 gpd. Based on the 2015 CWSC Urban Water Management Plan, the CWSC water supply (and projections to year 2040) are sufficient to meet the future demand projections for the region. Combined with the Project, this equates to an increase of less than 0.7% of the CWSC annual water demand. Pursuant to the Water code, certain larger projects are required to obtain a Water Supply Assessment to demonstrate that adequate water supplies are available to meet the needs of the individual project. With regard to infrastructure, it is anticipated that related projects would comply with applicable requirements regarding the distribution infrastructure to serve the projected demand. As the Project would meet its infrastructure needs, cumulative impacts would be less than significant.

6.0 CONCLUSION

The Project would be designed and operated in compliance with the relevant regulatory requirements. Based on the analysis contained in this report no significant impacts have been identified nor are significant impacts expected to the existing wastewater and water infrastructure and capacities within the vicinity of the Project Site as a result of the Project.

7.0 REFERENCES

California Natural Resources Agency, "2018 California Environmental Quality Act (CEQA) Statute and Guidelines - Appendix G: Environmental Checklist Form", dated 2018.

California Water Service Company, "Dominguez District 2015 Urban Water Management Plan", dated 2015.

California Water Service Company, "Water Atlas Map", dated October 2016.

County of Los Angeles Flood Control District, "As-Built Plans No. 314," dated July 1966.

County of Los Angeles Sanitation District, "Sanitation Districts' Service Area", dated August 2018.

County of Los Angeles Sanitation District, "Table 1 - Loadings for Each Class of Land Use", dated August 2018.

West Basin Municipal Water District, "Recycled Water Atlas Maps", dated May 2010.

Los Angeles County Department of Public Health Guidelines for Alternate Water Sources: Indoor and Outdoor Non-Potable Uses dated February 2016.

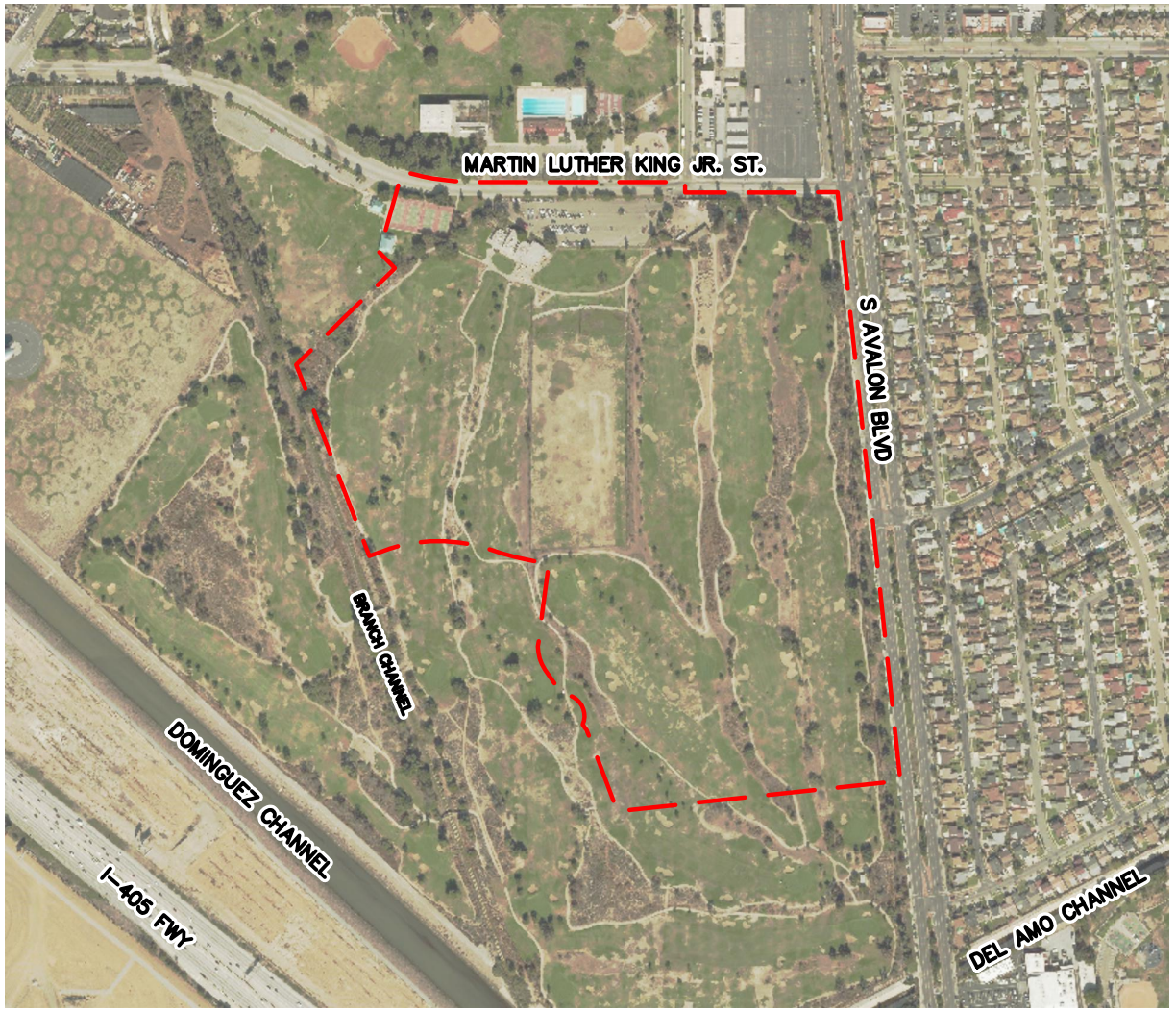
FIGURES

LEGEND:

APPROXIMATE SITE LIMITS

NOTES:

1. BACKGROUND AERIAL IMAGE REFERENCED FROM BING MAPS ON 30 JULY 2018.
2. APPROXIMATE SITE LIMITS BASED ON THE PLAN TITLES "CAROL KIMMELMAN SPORTS AND ACADEMIC CENTER, ILLUSTRATIVE OVERALL SITE PLAN" BY MEIS ARCHITECTS, INC.



700 350 0 700

SCALE: 1"=700'

LANGAN
Langan Engineering and Environmental Services, Inc.
32 Executive Park, Suite 130
Irvine, CA 92614
T: 949.255.8640 F: 949.255.8641 www.langan.com

Project	CAROL KIMMELMAN ATHLETIC AND ACADEMIC CENTER UNINCORPORATED AREA OF LOS ANGELES COUNTY CA
Drawing Title	SITE VICINITY MAP
Project No.	700060401
Date	12 APRIL 2019
Drawn By	JL
Checked By	FI
Figure No.	1

© 2018 Langan

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Exhibits\Utility Report Exhibits\700060401-FIG-01-Site Location Plan.dwg Date: 4/16/2019 Time: 09:20 User: dhodson Style Table: Langan.stb Layout: 8.5 X 11



NOTE:

1. CONCEPTUAL SITE PLAN BASED ON THE PLAN TITLES "CAROL KIMMELMAN SPORTS AND ACADEMIC CENTER, ILLUSTRATIVE OVERALL SITE PLAN" BY MEIS ARCHITECTS, INC.

LEGEND

TENNIS CENTER

1. WELCOME CENTER
2. LEARNING CENTER
3. ENTRY PLAZA
4. BASKETBALL COURTS
5. COMPETITION VENUE (12 HARD COURTS)
6. PLAYER DEVELOPMENT / COLLEGIATE CENTER
7. TOURNAMENT/ LEAGUE ADMINISTRATION BUILDING
8. 100M SPRINT TRACK
9. 4 CLAY COURTS
10. MONUMENT ENTRY/ SIGN
11. CENTRAL PLAZA
12. 8 36 FT COURTS
13. 4 60 FT COURTS (+4 FUTURE COURTS)
14. TRAINING TURF
15. TENNIS CENTER COURTS (24 HARD COURTS)
16. FUTURE COVERED COURTS (6 COURTS)
17. MAINTENANCE BUILDING
18. OUTDOOR EXERCISE COURSE
19. VISITOR PARKING
20. BUS PARKING
21. EMPLOYEE PARKING
22. OVERFLOW PARKING

SOCCER CENTER

23. 2 NATURAL GRASS MULTIPURPOSE FIELDS
24. 6 FULL SIZE NATURAL GRASS SOCCER FIELDS
25. 2 FULL SIZE ARTIFICIAL TURF SOCCER FIELDS
26. SUPPORT BUIDLING
27. SOCCER PARKING
28. OVERFLOW PARKING

N

NOT TO SCALE

MEIS CAROL KIMMELMAN SPORTS AND ACADEMIC CAMPUS

COUNTY OF LOS ANGELES

ILLUSTRATIVE OVERALL SITE PLAN

07/20/2018

0 100 250 500

A 100

LANGAN
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Irvine, CA 92614
T: 949.255.8640 F: 949.255.8641 www.langan.com

Project: CAROL KIMMELMAN ATHLETIC AND ACADEMIC CENTER
UNINCORPORATED AREA OF LOS ANGELES COUNTY CA

Drawing Title: CONCEPTUAL SITE PLAN

Project No. 700060401
Date 12 APRIL 2019
Drawn By JL
Checked By FI

Figure No. 2

© 2018 Langan

Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Exhibits\Utility Report Exhibits\700060401-FIG-02-Conceptual Site Plan.dwg Date: 4/16/2019 Time: 09:39 User: dhodson Style Table: Langan.stb Layout: 11 X 17

LEGEND:

- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING RECYCLED WATER MAIN

NOTES:

1. BACKGROUND AERIAL IMAGE REFERENCED FROM BING MAPS ON 30 JULY 2018.
2. LOCATIONS OF ALL EXISTING UTILITIES AND APPURTENANCES ARE NOT TO SCALE AND FOR SCHEMATIC PURPOSES ONLY.



400 200 0 400 800

SCALE: 1"=400'

LANGAN
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Project	CAROL KIMMELMAN ATHLETIC AND ACADEMIC CENTER UNINCORPORATED AREA OF LOS ANGELES COUNTY CA
Drawing Title	EXISTING WATER AND SEWER MAP
Project No.	700060401
Date	12 APRIL 2019
Drawn By	JL
Checked By	FI
Figure No.	3

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Filename: \\langan.com\data\IRV\data4\700060401\Project Data\CAD\01\SheetFiles\Exhibits\Utility Report Exhibits\700060401-FIG-03-.dwg Date: 4/16/2019 Time: 09:48 User: dhodson Style Table: Langan.stb Layout: 11 X 17

APPENDIX A
County of Los Angeles Sanitary Sewer Atlas Maps

SEE SHT. NO. S-1703

C-37
C-38
C-43

SAN DIEGO F R W Y

CITY OF LOS ANGELES

COUNTY OF LOS ANGELES

CITY OF CARSON

VICTORIA REGIONAL PARK

VICTORIA GOLF COURSE

Project Site

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

SEE SHT. NO. S-1759

AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

LEGEND

- CLAY SEWERS MAINTAINED BY SMD, 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 258

SEE SHT. NO. S-1705

MAP REV
05-19-16

DATA BASE REV
01-30-86

CONSOLIDATED S.M.D.

SEE SHT. NO. S-1758

C-36
C-38
C-39

CITY OF CARSON

Project Site

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

LEGEND

- CLAY SEWERS MAINTAINED BY SMD. 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 731

SAN. DIST. TRUNK SEWER BY

SEE SHT. NO. S-1704
SEE SHT. NO. S-1814
SEE SHT. NO. S-1760

E 4,207,000
E 4,054,000

MAP REV
03-18-14

DATA BASE REV
10-20-87

CONSOLIDATED S.M.D.

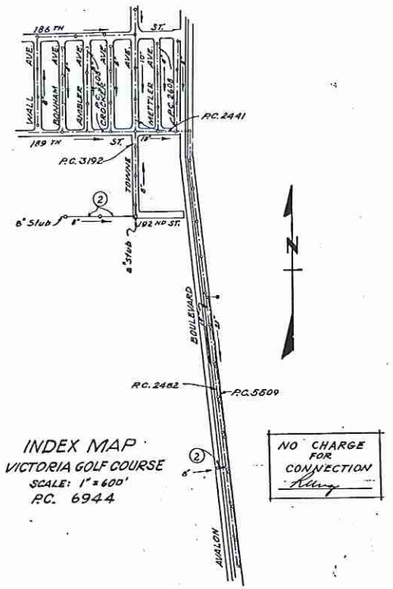
T: 764 G-3

0519.0519.1759

TRIM LINE

TRIM LINE

B.M. 23-6 ELEV. 18.928
Avalon Blvd. & D.W.&P. Tower No 48
Sht. C.S.Mon. in Wall 14.4 W. of Center of Tower
C.S.F.B. 2317 Pg. 114



INDEX MAP
VICTORIA GOLF COURSE
SCALE: 1" = 600'
P.C. 6944

NO CHARGE FOR CONNECTION
Kling

LENNOX BUILDING DISTRICT No. 7

USE EXTRA STRENGTH PIPE. ALL PIPE IS STANDARD DEPTH EXCEPT AS NOTED.
USE MECHANICAL COMPRESSION JOINTS FOR ALL VITRIFIED CLAY PIPE SEWERS PER SPEC., SECS. 36, 48, & 49.
ALL STRUCTURES SHALL BE BRICK SEWER STRUCTURES AS PER PLAN NO. S-184, EXCEPT AS NOTED.
USE STANDARD MANHOLE FRAMES AND COVERS AS PER PLAN NO. S-117, EXCEPT AS NOTED.
USE FORMULA NO. 2, SEC. 24 OF SPECIFICATIONS TO COMPUTE ALLOWABLE LEAKAGE.
CONSTRUCT HOUSE LATERALS WITH RISERS AT PROPERTY LINE & FIVE FEET BELOW CURB GRADE, OR GRADE OF CENTER LINE OF STREET, EXCEPT AS NOTED.
(7.5%) FIGURE IN CIRCLE AT ENDS OF HOUSE LATERALS INDICATE DEPTH BELOW CURB GRADE, OR GRADE OF CENTER LINE OF STREET.
~~(7.5%) FIGURE IN CIRCLE AT ENDS OF HOUSE LATERALS INDICATE HOUSE LATERALS SHALL BE CONSTRUCTED WITH 1/4" RISE PER FOOT TO PROPERTY LINE.~~
~~(7.5%) WORDS IN CIRCLE AT ENDS OF HOUSE LATERALS INDICATE "A" SHALL BE LAID HORIZONTAL AND HOUSE LATERALS SHALL BE CONSTRUCTED WITH 1/4" RISE PER FOOT TO PROPERTY LINE.~~
ALL HOUSE LATERALS SHALL BE CONSTRUCTED ON A STRAIGHT ALIGNMENT AT RIGHT ANGLES FROM THE MAIN LINE SEWER EXCEPT AS SHOWN ON THE PLANS. HOUSE LATERALS FROM CHIMNEYS SHALL NOT HAVE AN ANGLE OF LESS THAN 45 DEGREES WITH THE MAIN LINE SEWER.
THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE MADISON 9-4141, EXT. 61881 AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
~~CONSTRUCTION IN STATE HIGHWAYS SHALL CONFORM WITH STATE HIGHWAY PERMIT AND THE CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION THEREWITH.~~
ALL STATE AND LOCAL TRENCH SAFETY ORDERS WILL BE RIGIDLY ENFORCED.
RESURFACING SCHEDULE: RESURFACE TRENCH WITHIN PAVED AREA WITH PREMIX ROCK AND OIL 3 INCHES IN THICKNESS ON 6 INCHES OF AGGREGATE BASE MATERIALS, EXCEPT AS NOTED BELOW:

PAGE NO.	STREET	STATION LIMITS FROM	STATION LIMITS TO	TYPE OF RESURFACING

ALL CONCRETE CROSS GUTTERS, CURBS, GUTTERS, PAVEMENT, AND DRIVEWAYS SHALL BE FURNISHED OR LAID AS PER LOS ANGELES COUNTY ROAD DEPARTMENT REQUIREMENTS.
THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF COUNTY ENGINEER SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT:

STANDARD LEGEND	S-44
STANDARD BRICK SEWER STRUCTURE	S-184
STANDARD MANHOLE FRAME AND COVER	S-117
STANDARD MANHOLE STEPS	S-161
STANDARD STOPPER	S-139
STANDARD WYE SUPPORT	S-171
STANDARD SUPPORT AND PROTECTION OF SEWER PIPES	S-175
STANDARD BEDDING FOR SEWER PIPES	S-179
MINIMUM EXCAVATION SAFETY REQUIREMENTS	S-180

THE UNDERGROUND UTILITY COMPANIES WITHIN THE LIMITS OF THIS PROJECT ARE AS FOLLOWS:
(1) DOMINGUEZ WATER CO.
(2) RICHFIELD OIL CO.
(3)
(4)

NO CONNECTIONS FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS WITHOUT WRITTEN PERMISSION FROM THE CHIEF ENGINEER AND GENERAL MANAGER OF THE COUNTY SANITATION DISTRICTS.

P.C. 6944
PAGE 1

PRIVATE CONTRACT NO. 6944

PROFILE, ALIGNMENT AND GRADE OF
SANITARY SEWERS
TO BE CONSTRUCTED IN
VICTORIA GOLF COURSE
AND OTHER RIGHTS OF WAY

37140

1 SHEET, 2 PAGES

SCALE HOR. 1" = 40'
VERT. 1" = 4'

APRIL 1964

COUNTY OF LOS ANGELES, CALIFORNIA

JOHN A. LAMBIE COUNTY ENGINEER

APPROVED BY [signature] SANITATION ENGINEER
J. D. PARKHURST, CHIEF ENGINEER OF COUNTY SANITATION DISTRICTS NO.
RECOMMENDED BY [signature] ASST. SANITATION ENGINEER
APPROVED BY [signature] OFFICE ENGINEER
DESIGNED BY [signature]
REG. C. E. NO. 10633

NOTES.
WORK SHALL BE CONSTRUCTED ACCORDING TO STANDARD SPECIFICATIONS DATED May 25, 1962 ON FILE IN THE OFFICE OF THE COUNTY ENGINEER AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURB, CENTER LINE OF STREET OR CENTER LINE OF ALLEY ARE SHOWN BY CIRCLES ON PROFILES. AT ALL POINTS BETWEEN DESIGNATED POINTS THE GRADE SHALL BE ESTABLISHED SO AS TO CONFORM TO A STRAIGHT LINE DRAWN BETWEEN SAID DESIGNATED POINTS.
ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S., SEA LEVEL DATUM OF 1929.
UNIT PRICES FOR ADDITIONAL WORK WHICH MAY BE REQUIRED BUT WHICH CANNOT BE ASCERTAINED IN ADVANCE, SHALL BE SUBMITTED IN THE PROPOSAL.
THIS DRAWING AND THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATIONS.

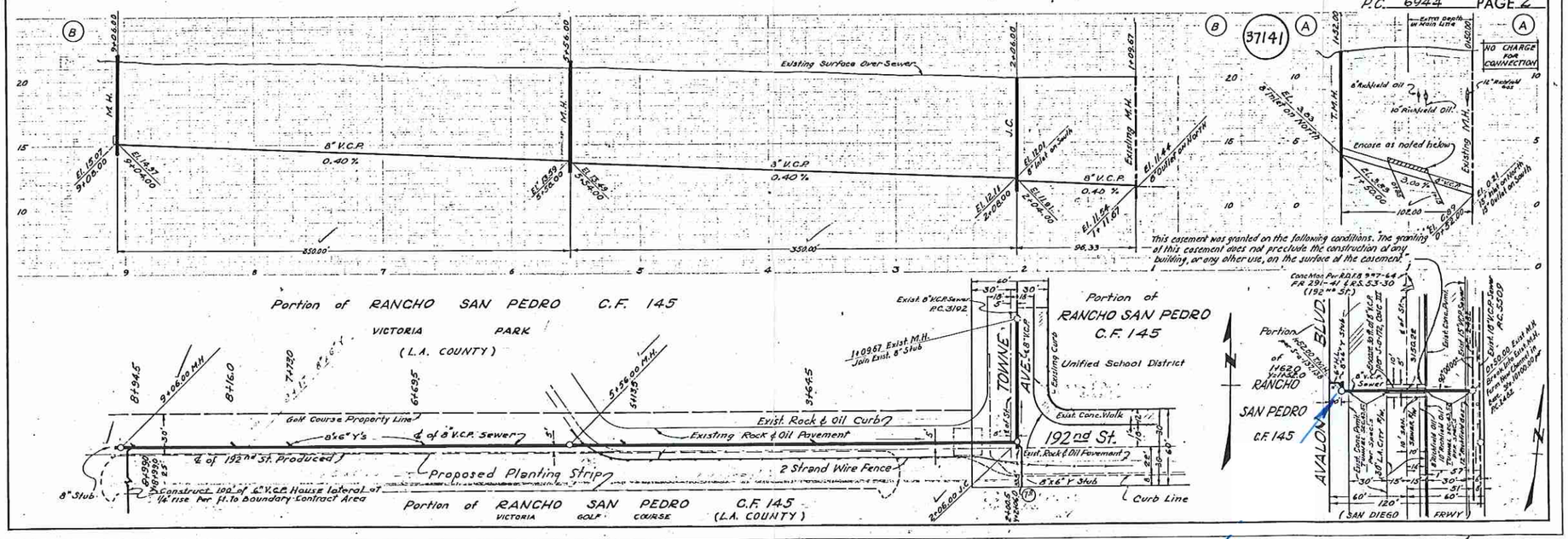
LAYOUT	J.FURSE	APR. 1964	UNDERGROUND	R. Scott	6-15-64
TRACED	J.FURSE	APR 1964	BENCH MARKS	J.J. Lanigan	6-15-64
CHECKED	M. OBRADOVITCH	MAY 1964	MAINTENANCE	C. PEARSON	6-16-64
F. B. 2317			INSPECTOR		
A.B. 7330	W.S. 26		RECORD PLANS		

TRIM LINE

TRIM LINE

P.C. 6944 PAGE 2

37141


Existing Surface Over Sewer
M.H.
J.C.
8" V.C.P. 0.40 %
3" V.C.P. 0.40 %
Existing M.H.
8" Stub
8" Outlet on North
8" Outlet on South
Existing Depth w Main Line
NO CHARGE FOR CONNECTION
8" Richfield Oil
10" Richfield Oil
Encase as noted below
3.00 %
This easement was granted on the following conditions. The granting of this easement does not preclude the construction of any building, or any other use, on the surface of the easement.
Portion of RANCHO SAN PEDRO C.F. 145
VICTORIA PARK (L.A. COUNTY)
Golf Course Property Line
℄ of 8" V.C.P. Sewer
8"x6" Y's
Existing Rock & Oil Pavement
℄ of 192nd St. Produced
Proposed Planting Strip
2 Strand Wire Fence
8" Stub
Construct 100 of 6" V.C.P. House lateral at 1/4" rise Per Ft. to Boundary Contract Area
Portion of RANCHO SAN PEDRO C.F. 145 VICTORIA GOLF COURSE (L.A. COUNTY)
Exist. 8" V.C.P. Sewer P.C. 3192
Join Exist. 8" Stub
TOWNE AVE.
Existing Curb
Exist. Conc. Walk
Exist. Rock & Oil Pavement
6"x6" Y Stub
Curb Line
Portion of RANCHO SAN PEDRO C.F. 145
Unified School District
192nd St.
Portion of 1620 Ac. RANCHO SAN PEDRO C.F. 145
AVALON BLVD.
Exist. 10" V.C.P. Sewer P.C. 5500
Exist. M.H.
Exist. 8" V.C.P. Sewer
Exist. Conc. Arch
Exist. Conc. Walk
Exist. Curb & Gutter
Exist. Rock & Oil Pavement
Exist. 8" Sewer
Exist. 6" Sewer
Exist. 8" Sewer
Exist. 8" Sewer
Exist. 8

APPENDIX B

California Water Service Company
Domestic Water Atlas Maps

DOM-25-32

ENGINEERING DEPARTMENT

GIS

DOMINGUEZ DISTRICT
WATER SYSTEM

CONFIDENTIAL: Applicant hereby agrees that any plans or markings made by California Water Service Co. which document the estimated location of underground facilities do not constitute such documentation and without any warranties, representations, or guarantees of completeness or accuracy. Applicant acknowledges that said information is a suggestion as to possible locations, as would be necessary to protect Cal Water's property. Applicant accepts full responsibility for any damage to Cal Water's facilities. Applicant agrees that Cal Water is not liable for any direct or indirect damages arising out of the use of said information.

N

SCALE: 1" = 200'

Issued: October 2016

Plat Sheet: DOM-26-32

DOM-26-31

DOM-26-33

DOM-27-32

AVALON BLVD

TOWNE AVE

E 192ND ST

E BRENNER DR

E ELSMERE DR

E HOLBORN DR

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

EDDINGTON DR

ENSLOW DR

CAMPAIGN DR

ALONDA DR

COLERMAN, AGNES F

HIDER, MARVO

SUTERA, INA

14" TRANS JO 5095

8" TRANS JO 1351

8" TRANS JO 3025

8" TRANS JO 3026

8" TRANS JO 3074

6" TRANS JO 3025

6" TRANS JO 3026

6" TRANS JO 3866

6" TRANS JO 3919

8" BYPASS TRANS JO 5095 F.B. 62, PG. 57

8" TRANS OFFSET JO 1351 F.B.51, PG.56

8" SER. 8" MET. W/ 4" BYPASS JO 4155 F.B.48, PG.24

4" SER. 4" MET. JO 1351

3" SER. 3" MET. JO 1571

8" DI P-19862

3631 P-19862

6" STL OFFSET JO 3025

6" TRANS In 12" STL CASE JO 3025

12" TRANS In 20" STL CASE JO 5095

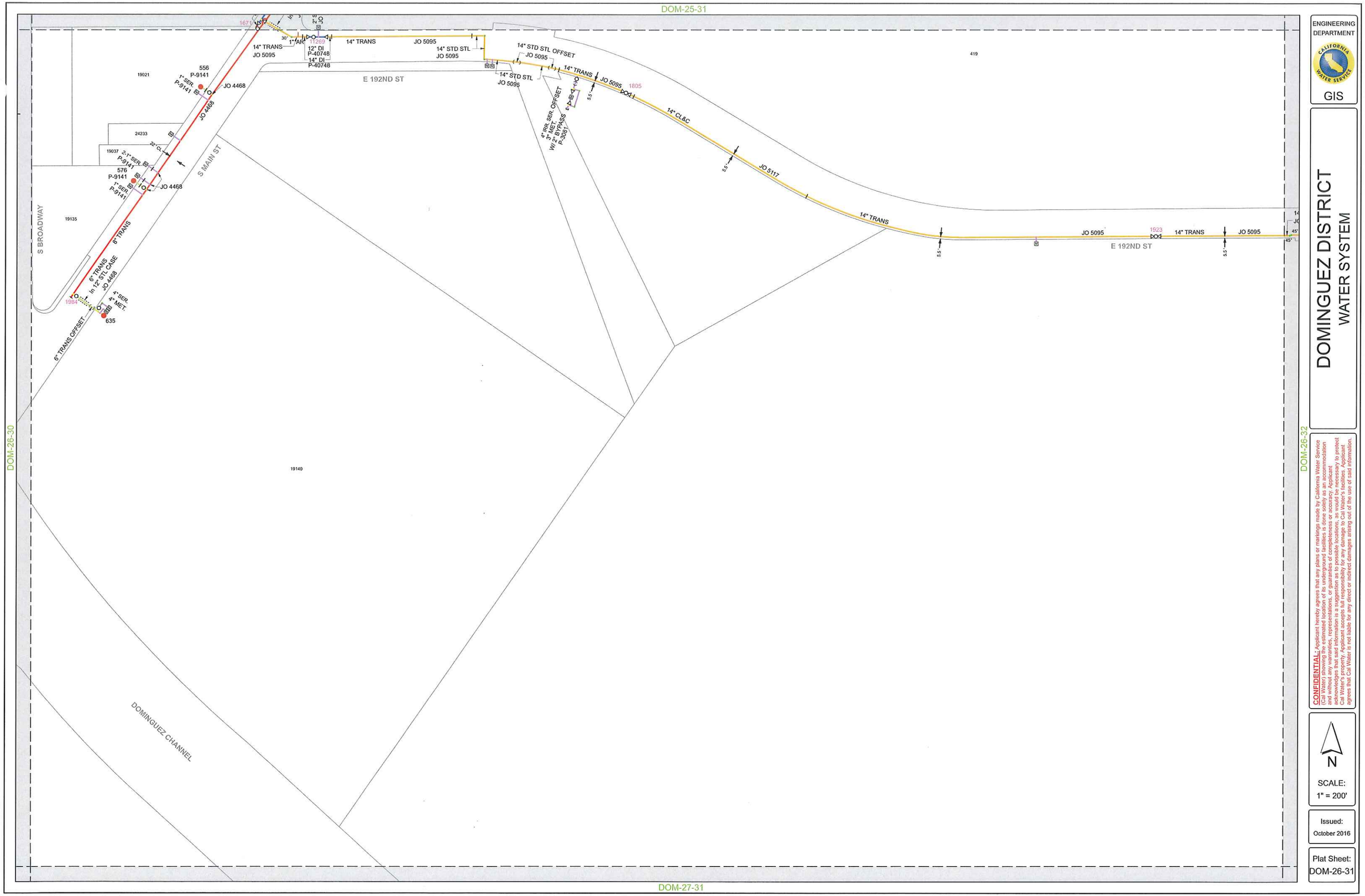
4" SER. 4" MET. JO 1351

4" SER. 2" MET. JO 3333

773 4" RISER JO 1351

NC 2398

609 610 543 595 596 597 598 600 601 602 603 604 605 650 648 672 678 683 691 700 704 717 730 736 762 765 772 773 798 819 820 825 847 853 857



ENGINEERING DEPARTMENT

GIS

DOMINGUEZ DISTRICT
WATER SYSTEM

CONFIDENTIAL: Applicant hereby agrees that any plans or markings made by California Water Service (Cal Water) showing the estimated location of its underground facilities is done solely as an accommodation and without any warranties, representations, or guaranties of completeness or accuracy. Applicant acknowledges that said information is a suggestion as to possible locations, as would be necessary to protect Cal Water's property. Applicant accepts full responsibility for any damage to Cal Water's facilities. Applicant agrees that Cal Water is not liable for any direct or indirect damages arising out of the use of said information.

N

SCALE:
1" = 200'

Issued:
October 2016

Plat Sheet:
DOM-26-31

ENGINEERING DEPARTMENT

CALIFORNIA WATER SERVICE

GIS

DOMINGUEZ DISTRICT
WATER SYSTEM

CONFIDENTIAL: Applicant hereby agrees that any plans or markings made by California Water Service (Cal Water) showing the estimated location of its underground facilities is done solely as an accommodation and that Cal Water makes no guarantee or warranty of complete accuracy as to the location. Applicant acknowledges that said information is a suggestion as to possible locations, as would be necessary to protect Cal Water's property. Applicant accepts full responsibility for any damage to Cal Water's facilities. Applicant agrees that Cal Water is not liable for any direct or indirect damages arising out of the use of said information.

N

SCALE: 1" = 200'

Issued: October 2017

Plat Sheet: DOM-27-32

DOM-26-32

DOM-27-31

DOM-27-33

DOM-28-32

AVALON BLVD

PHILLIPS, BARBARA

REINHART AVE

DUNBROOKE AVE

ALONDA DR

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

EDDINGTON DR

CAMPAIGN DR

E TURMONT ST

E GLADWICK ST

E HELMICK ST

QUIXLEY ST

E DIMONDALE DR

E CYRENE ST

E DENWALL DR

E CARSON PLAZA DR

E DEL AMO BLVD

P-DOM0540

P-82637

APPENDIX C

California Water Service Company Domestic Water and County Sanitation Districts of Los Angeles County Will Serve Letters

CALIFORNIA WATER SERVICE
Rancho Dominguez District 2632 West 237th Street, Torrance, CA 90505
Tel: (310) 257-1400

September 11, 2018

Langan
32 Executive Park, Suite 130
Irvine, CA 92614
Attn: Jeffrey Leung

Will Serve Letter
340 M.L.K. Jr. Street (formerly East 192nd Street), Carson, CA
Staff Engineer: Jeffrey Leung

Dear Mr. Leung:

As a regulated utility, California Water Service Company Rancho Dominguez district ("Cal Water") has an obligation to provide water service in accordance with the rules and regulations of the California Public Utility Commission (CPUC). Assuming you receive all required permits from the City of Carson and / or County of Los Angeles, Cal Water will provide water service to the above referenced project. Cal Water agrees to operate the water system and provide service in accordance with the rules and regulations of the California Public Utilities Commission (CPUC) and the company's approved tariffs on file with the CPUC. This will serve letter shall remain valid for **two years** from the date of this letter. If construction of the project has not commenced within this **two year** time frame, Cal Water will be under no further obligation to serve the project unless the developer receives an updated letter from Cal Water reconfirming our commitment to serve the above mentioned project. Additionally, Cal Water reserves the right to rescind this letter at any time in the event its water supply is severely reduced by legislative, regulatory or environmental actions.

Cal Water will provide such potable water at such pressure as may be available from time to time as a result of its normal operations per the company's tariffs on file with the CPUC. Installation of facilities through developer funding shall be made in accordance with the current rules and regulations of the CPUC including, among others, Tariff Rules 15 and 16 and General Order 103-A. In order for us to provide adequate water for domestic use as well as fire service protection, it may be necessary for the developer to fund the cost of special facilities, such as, but not limited to, booster pumps, storage tanks and/or water wells, in addition to the cost of mains and services. Cal Water will provide more specific information regarding special facilities and fees after you provide us with your improvement plans, fire department requirements, and engineering fees for this project.

This letter shall at all times be subject to such changes or modifications by the CPUC as said Commission may, from time to time, require in the exercise of its jurisdiction.

If you have any questions regarding the above, please call me at (310) 257-1400.

Sincerely,

Daniel Armendariz
District Manager

cc: Ting He – Cal Water Engineering Dept
Ralph Felix – Cal Water Operations Manager
Renzo Ayala – Cal Water Interim Superintendent
File

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

February 28, 2019

Ref. Doc. No.: 4914256

Mr. Fred Irianto
Senior Project Manager
Langan
515 South Flower Street
Suite 2860
Los Angeles, CA 90071

Dear Mr. Irianto:

Will Serve Letter for the Carol Kimmelman Sports and Academic Campus Center

The Sanitation Districts of Los Angeles County (Districts) received your will serve letter request for the subject project on January 23, 2019. The proposed project is located within the jurisdictional boundaries of District No. 8. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Del Amo Trunk Sewer, located in Avalon Boulevard south of Del Amo Boulevard. The Districts' 24-inch diameter trunk sewer has a capacity of 3.7 million gallons per day (mgd) and conveyed a peak flow of 2.4 mgd when last measured in 2015.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a capacity of 400 mgd and currently produces an average flow of 254.7 mgd.

3. The expected average wastewater flow from the project, described in the request as a combined 56,000 square feet of administrative or maintenance use and a total of 23,000 square feet of sports type structure, is 24,700 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link.

In determining the impact to the Sewerage System and applicable connection fees, the Districts' Chief Engineer and General Manager will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: A. Schmidt
A. Howard

APPENDIX D

West Basin Municipal Water District Recycled Water Atlas Maps

DF089

186TH ST

186TH ST

186TH ST

C-18

77+77.30

77+41.97

77+10

26+52.19

24" CML & WSP
P3 2002-07

24" CML & W
P3 2002

4" BO

AVALON BLVD

73 '

75+50

AMBLER AVE

CROCKER AVE

TOWNE AVE

METTLER AVE

AVALON BLVD

73 '

30" WSP CL 200

LOYOLA AVE

LOYOLA AVE

MOREHOUSE DR

GRAMBLING PL

HOWARD AVE

189TH ST

189TH ST

68+81.5

BO

DG088

DG090

67+26.22

3" AV

UNIVERSITY DR

57+25

57+20

BO

2" AV

22 '

65+60

65+06.42

73 '

30" WSP CL 200

P-6 2002-03

12" PVC C 900 CL 200

TOWNE AVE

AVALON BLVD

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

BRENNER DR

BRENNER DR

ND ST

192ND ST

22 '

48+58.75
24" X 12"

48+58.75
10+00

73 '

BO

3" AV

28 '

45+22.08
30"-X-24"

BO
60+22.5

50+94.13

12" WSP-CL-200 — 48+70 — 48+50 — 24"-WSP-CL-200

P-5 2002-03

10+01.91 - P-5 2002-03 -

60+02.58

44+98.78

2" AV

10+64

75.41

+70

7.50

192ND ST

BO

44+29.75

52 '

30" PVC CL 200

DH089

0 50 100 200
Feet
NOT FOR CONSTRUCTION USE

WBMWD RECYCLED WATER ATLAS

DISCLAIMER:
This map represents a visual aid intended to assist Public Utility Department personnel with the management of Recycle System facilities. Data provided hereon is not a guarantee of actual field conditions nor a substitute for record drawings and field verification.

May 03, 2010

DG089

DG089

DH088

DH090

DI089

192ND ST

12" WSP-CL-200 48+70

50+94.13

P-5 2002-03

48+50 24"-WSP-CL-200

45+22.08

30"-X 24"

60+02.58

44+98.78

3 10+01.91 P-5 2002-03

2" AV 10+64

10+75.41

10+70

10+67.50

BO

30" PVC CL 200
P-4 2002-03

44+29.75

52'

43+75.32

43+38.55

43+30

C-28 1998-11

30" WSP CL 200

15'

78'

15' EASMT.

AVALON BLVD

34+20

33+47

32+72

BO

31+93

3" AV

P-2 2002-03

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

ELSMERE DR

HOLBORN DR

ALONDA DR

0 50 100 200
Feet
NOT FOR CONSTRUCTION USE

DISCLAIMER:
This map represents a visual aid intended to assist Public Utility Department personnel with the management of Recycle System facilities. Data provided hereon is not a guarantee of actual field conditions nor a substitute for record drawings and field verification.

WBMWD RECYCLED WATER ATLAS	May 03, 2010	DH089

DG089

DH088

DH090

DI089

192ND ST

12" WSP-CL-200 48+70

50+94.13

P-5 2002-03

48+50 24"-WSP-CL-200

45+22.08

30"-X 24"

60+02.58

44+98.78

3 10+01.91 P-5 2002-03

2" AV 10+64

10+75.41

10+70

10+67.50

BO

30" PVC CL 200
P-4 2002-03

44+29.75

52'

43+75.32

43+38.55

43+30

C-28 1998-11

30" WSP CL 200

15'

78'

15' EASMT.

AVALON BLVD

34+20

33+47

32+72

BO

31+93

3" AV

P-2 2002-03

DUNBROOKE AVE

REINHART AVE

GALWAY AVE

WADLEY AVE

LEAPWOOD AVE

ELSMERE DR

HOLBORN DR

ALONDA DR

0 50 100 200
Feet
NOT FOR CONSTRUCTION USE

DISCLAIMER:
This map represents a visual aid intended to assist Public Utility Department personnel with the management of Recycle System facilities. Data provided hereon is not a guarantee of actual field conditions nor a substitute for record drawings and field verification.

WBMWD RECYCLED WATER ATLAS	May 03, 2010	DH089

APPENDIX E

County of Los Angeles Sanitation District - Sanitary sewer Discharge Table

TABLE 1

LOADINGS FOR EACH CLASS OF LAND USE

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons Per Day)	COD (Pounds Per Day)	SUSPENDED SOLIDS (Pounds Per Day)
R E S I D E N T I A L				
Single Family Home	Parcel	260	1.22	0.59
Duplex	Parcel	312	1.46	0.70
Triplex	Parcel	468	2.19	1.05
Fourplex	Parcel	624	2.92	1.40
Condominiums	Parcel	195	0.92	0.44
Single Family Home (reduced rate)	Parcel	156	0.73	0.35
Five Units or More	No. of Dwlg. Units	156	0.73	0.35
Mobile Home Parks	No. of Spaces	156	0.73	0.35
C O M M E R C I A L				
Hotel/Motel/Rooming House	Room	125	0.54	0.28
Store	1000 ft^2	100	0.43	0.23
Supermarket	1000 ft^2	150	2.00	1.00
Shopping Center	1000 ft^2	325	3.00	1.17
Regional Mall	1000 ft^2	150	2.10	0.77
Office Building	1000 ft^2	200	0.86	0.45
Professional Building	1000 ft^2	300	1.29	0.68
Restaurant	1000 ft^2	1,000	16.68	5.00
Indoor Theatre	1000 ft^2	125	0.54	0.28
Car Wash				
Tunnel - No Recycling	1000 ft^2	3,700	15.86	8.33
Tunnel - Recycling	1000 ft^2	2,700	11.74	6.16
Wand	1000 ft^2	700	3.00	1.58
Financial Institution	1000 ft^2	100	0.43	0.23
Service Shop	1000 ft^2	100	0.43	0.23
Animal Kennels	1000 ft^2	100	0.43	0.23
Service Station	1000 ft^2	100	0.43	0.23
Auto Sales/Repair	1000 ft^2	100	0.43	0.23
Wholesale Outlet	1000 ft^2	100	0.43	0.23
Nursery/Greenhouse	1000 ft^2	25	0.11	0.06
Manufacturing	1000 ft^2	200	1.86	0.70
Dry Manufacturing	1000 ft^2	25	0.23	0.09
Lumber Yard	1000 ft^2	25	0.23	0.09
Warehousing	1000 ft^2	25	0.23	0.09
Open Storage	1000 ft^2	25	0.23	0.09
Drive-in Theatre	1000 ft^2	20	0.09	0.05

TABLE 1
(continued)
LOADINGS FOR EACH CLASS OF LAND USE

DESCRIPTION	UNIT OF MEASURE	FLOW (Gallons Per Day)	COD (Pounds Per Day)	SUSPENDED SOLIDS (Pounds Per Day)
C O M M E R C I A L				
Night Club	1000 ft^2	350	1.50	0.79
Bowling/Skating	1000 ft^2	150	1.76	0.55
Club	1000 ft^2	125	0.54	0.27
Auditorium, Amusement	1000 ft^2	350	1.50	0.79
Golf Course, Camp, and Park (Structures and Improvements	1000 ft^2	100	0.43	0.23
Recreational Vehicle Park	No. of Spaces	55	0.34	0.14
Convalescent Home	Bed	125	0.54	0.28
Laundry	1000 ft^2	3,825	16.40	8.61
Mortuary/Cemetery	1000 ft^2	100	1.33	0.67
Health Spa, Gymnasium				
With Showers	1000 ft^2	600	2.58	1.35
Without Showers	1000 ft^2	300	1.29	0.68
Convention Center, Fairground, Racetrack, Sports Stadium/Arena	Average Daily Attendance	10	0.04	0.02
I N S T I T U T I O N A L				
College/University	Student	20	0.09	0.05
Private School	1000 ft^2	200	0.86	0.45
Church	1000 ft^2	50	0.21	0.11

APPENDIX F

County of Los Angeles Sanitation District - Water Treatment Plant Service Area Map

SANITATION DISTRICTS OF LOS ANGELES COUNTY

LEGEND

- ACTIVE SOLID WASTE FACILITIES
- CLOSED SANITARY LANDFILLS
- WATER RECLAMATION PLANTS (WRP) and JOINT WATER POLLUTION CONTROL PLANT (JWPCP)
- TRUNK SEWERS
- OUTFALLS AND EFFLUENT LINES
- RECYCLED WATER LINES
- (14) SANITATION DISTRICT NUMBER or DESIGNATION
- ADMINISTRATION OFFICE AND FIELD OFFICES
- PUMPING PLANTS
- GAS-TO-ENERGY FACILITIES
- REFUSE-TO-ENERGY FACILITIES
- RECYCLE CENTERS
- INTERMODAL FACILITY (IMF) and MATERIALS RECOVERY (MR) / TRANSFER FACILITIES (TF)

0 0.5 1 2 3 4 5 Miles
0 5,000 10,000 15,000 20,000 25,000 Feet

December 2015

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VENTURA COUNTY
CALABASAS LANDFILL
Calabasas Gas-to-Energy Facility
CALABASAS
MISSION CANYON LANDFILL
SANTA MONICA MOUNTAINS
MALIBU
SANTA MONICA BAY
SANTA MONICA
BEVERLY HILLS
WEST HOLLYWOOD
LOS ANGELES
CULVER CITY
BURBANK
GLENDALE
LA CAÑADA FLINTRIDGE
LA CANADA WRP
SCHOLL CANYON LANDFILL
SAN GABRIEL MOUNTAINS
PASADENA
SIERRA MADRE
MONROVIA
ARCADIA
BRADBURY
DUARTE
AZUSA
GLENDORA
SAN DIMAS
LA VERNE
CLAREMONT
IRWINDALE
SAN MARINO
SOUTH PASADENA
TEMPLE CITY
BALDWIN PARK
COVINA
SAN GABRIEL VALLEY FIELD OFFICE
ALHAMBRA
SAN GABRIEL
ROSEMEAD
EL MONTE
S. EL MONTE
WEST COVINA
POMONA
POMONA WRP
SAN BERNARDINO COUNTY
SAN JOSE CREEK WRP
JOINT ADMINISTRATION OFFICE
Puente Hills Recycle Center
SPADRA LANDFILL
Spadra Landfill Gas-to-Energy Facility
MONTEREY PARK
WHITTIER NARROWS WRP
COMMERCE REFUSE-TO-ENERGY
MONTEBELLO
PUENTE HILLS IMF
LA PUENTE
WALNUT
CITY OF COMMERCE
PUENTE HILLS FIELD OFFICE
Puente Hills Gas-to-Energy Facility
PUENTE HILLS LANDFILL
PUENTE HILLS MR/TF
CITY OF INDUSTRY
DIAMOND BAR
VERNON
MAYWOOD
HUNTINGTON PARK
BELL
CUDAHY
BELL GARDENS
PICO RIVERA
WHITTIER
LA HABRA HEIGHTS
SOUTH GATE TF
SOUTH GATE
SANTA FE SPRINGS
DOWNEY
LYNWOOD
NORWALK
DART
LA MIRADA
INGLEWOOD
EL SEGUNDO
HAWTHORNE
LAWNDALE
GARDENA
PARAMOUNT
BELLFLOWER
MANHATTAN BEACH
COMPTON
COMPTON FIELD OFFICE
CERRITOS
LOS COYOTES WRP
ARTESIA
ORANGE COUNTY
Project Site
HERMOSA BEACH
LAKEWOOD
REDONDO BEACH
CARSON
HAWAIIAN GARDENS
TORRANCE
CARSON FIELD OFFICE
PALOS VERDES ESTATES
LOMITA
JWPCP
JWPCP Total Energy
SIGNAL HILL
LONG BEACH WRP
PALOS VERDES LANDFILL
ROLLING HILLS ESTATES
ROLLING HILLS
LONG BEACH
SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF)
RANCHO PALOS VERDES
SAN PEDRO BAY
Ocean Discharge System

LOS ANGELES COUNTY VICINITY MAP

